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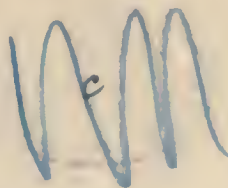
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RESULTS



OBSERVATIONS OF THE FIXED STARS

MADE WITH THE

MERIDIAN CIRCLE

AT THE

GOVERNMENT OBSERVATORY, MADRAS,

IN THE YEARS

1862, 1863 AND 1864,

UNDER THE DIRECTION OF

NORMAN ROBERT POGSON,

C.I.E., F.R.A.S., & F.M.U.

GOVERNMENT ASTRONOMER AT MADRAS.

PUBLISHED BY ORDER OF THE GOVERNMENT OF MADRAS.

MADRAS:

PRINTED AT THE LAWRENCE ASYLUM PRESS, BY G. W. TAYLOR,
1887.

748³
18/11/40
2/6/40

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To

THE RIGHT HON'BLE SIR MOUNTSTUART ELPHINSTONE GRANT DUFF,

LATE GOVERNOR OF MADRAS, C.G.S.I, C.I.E., F.R.S., M.A., &c., &c.

HONORABLE SIR,

The present volume, the first of a new series of Madras Observations, was intended to have been issued long before your retirement from the high and distinguished office of Governor of Madras, and was by your kind permission to be specially dedicated to you, whose discerning, enlightened and liberal views in regard to the encouragement of science, alone enabled me to commence publication, by the removal of certain arbitrary and suppressive restrictions which have prevented me and my predecessors from attempting anything of the kind for considerably more than thirty years past.

Without prompt publication of results, scientific researches in general, and above all astronomical observations, are comparatively useless. I came to India deeply impressed with this view, and with the full intention of bringing out an annual volume, and now that you Sir have rendered this possible, and I have every reason to feel assured that your successors in office will continue the valued privilege which you first saw fit to concede to the Madras Astronomer, viz., the right of distribution of his publications, enjoyed by every other astronomer in the world but so long disallowed at Madras; the one Observatory of India will, I hope, speedily recover its prestige and remain an enduring evidence of one of the many benefits conferred upon Southern India, during your regime as Her Majesty's representative at Madras.

With grateful recollections of past kindness and best wishes for your health, happiness and future well earned distinctions,

I remain, Honorable Sir,

Your most obedient Servant,

N. R. POGSON.

INTRODUCTION.

Meridional observations were commenced at the Madras Observatory on January 9th, 1793, with a little twenty-inch transit instrument, by Stanciliff, and a twelve-inch altitude and azimuth instrument, by Troughton; neither of them bearing an object glass of so much as an inch and a half in aperture. With these diminutive appliances the work of the Observatory was carried on until the year 1829. The records of the first nineteen years were simply copied out and transmitted to the Honorable Board of Directors of the East India Company. Those from 1812 to 1825 were published in two bulky folio volumes, but consisted only of unreduced observations of the Sun, Moon, old planets and brighter fixed stars. These two volumes were published by the Honorable Company's Astronomer, Mr. J. D. Goldingham, as Volumes 3rd and 4th, with a view to the previous records being subsequently printed, an arrangement which however was never carried out.

An important step in the history of the Observatory was made in the year 1830, when a five-foot Transit Instrument and a four-foot Mural Circle, both by Dollond, with object glasses of nearly four inches aperture, were erected under the superintendence of Mr. T. G. Taylor, one of the most able and energetic astronomers of his day. With these instruments, the celebrated "*Madras Catalogue*," containing positions of 11,015 stars reduced to the Epoch 1835, was accomplished between the years 1831 and 1843, and in spite of its weakest points, large instrumental errors of an unexpected nature in the Mural Circle, which Mr. Taylor did his best to eliminate before printing his final catalogue, its value at the present date may be inferred from the circumstance of a new edition being now called for by European astronomers. It is scarcely necessary to mention that I shall respond to this call with great pleasure as soon as the results of my own labors have been laid before the world, and time permits of the investigation of the remaining errors, both casual and systematic, which still require correcting in the former catalogue. The addition of the mean dates of observation in each co-ordinate, which will of course entail reference to every individual observation upon which the final star positions are based, is also a matter of such importance that there could be no excuse for its omission in case of a second edition of the Catalogue.

The Transit Instrument and Mural Circle were next employed, between 1849 and 1852, in the revision of 1440 stars of the British Association Catalogue, under the direction of Captain W. S. Jacob, Bombay Engineers; the results being published in Vol. VIII of the second series of Madras Observations.

A considerable number of star observations, made with the same instruments between 1853 and 1858, under the superintendence of Captain Jacob and of Major W. K. Worster, Madras Artillery, but only partially reduced to apparent places, will, when completed, form another catalogue of about 2,200 stars, for the epoch 1855. A selection of 317 of these stars, suspected of large proper motion, was printed in the "*Memoirs of the Royal Astronomical Society*", Vol. XXVIII.

There are also 1,331 observations of the Sun, 345 of the Moon, 1,680 of the principal planets and 333 of various minor planets, made with the old instruments during the same years, in continuation of those given in Volume 7 of the "*Madras Astronomical Observations*" awaiting publication.

It is now about forty years since the Astronomer Royal (then Prof. G. B. Airy) introduced a most important change in regard to meridian instruments, by suggesting a Transit Circle for the Royal Observatory in place of the two separate instruments hitherto employed for determining the absolute Right Ascensions and Polar Distances of celestial objects at Greenwich. The advantages of having both co-ordinates observed at the same time and by the same person, are so obvious, that it is surprising the old practice was so long endured by astronomers. The Royal Observatory was supplied with a magnificent Transit Circle in 1850, which was brought into use the following year, the object glass of its telescope being eight inches and its divided circle six feet in diameter. A fac-simile of the Greenwich instrument, subsequently supplied to the Cape Observatory, was first used there in 1855. Meanwhile however, in 1852, Mr. R. C. Carrington of Redhill, had a Transit Circle constructed for him by Messrs. Troughton and Simms, similar in all essential points to the new one at Greenwich, and divided by the same exquisite machinery, but with a five-inch object glass and a forty-two inch circle instead of the much larger and more costly size adopted at the Royal Observatory. When no longer required at the Redhill Observatory this fine instrument was removed to the Radcliffe Observatory, at Oxford, in 1861, and has been used there ever since.

In the year 1855, by the liberality of the Board of Directors of the Honorable East India Company, a new Transit Circle, similar to Mr. Carrington's, was ordered of Messrs. Troughton and Simms, upon the recommendation of Captain Jacob. The general superintendence of its construction was kindly undertaken by Mr. Carrington, who, in consultation with its able makers, advised such alterations in its various details as the experience of his own instrument had led him to consider advisable. The Transit Circle reached Madras in March, 1858, only a month before Captain Jacob's departure, and although orders were immediately issued for its erection, unforeseen difficulties and above all frequent changes in the direction of the Observatory, prevented it from being ready for use until four years after its arrival.

Similar instruments have since been supplied by the same eminent firm to Melbourne, Sidney and many other observatories, both public and private, at home and abroad. The description already given of any one of these instruments is so nearly applicable to all the others that the following brief details of the Madras Transit Circle may seem to many supererogatory, especially as the instrument has now been in constant use for nearly a quarter of a century.

BUILDINGS.

These consist of two blocks;—one comprising the old Observatory with its more recent additions; a long, low, narrow structure, extending 196 feet from East to West, by 25 from North to South; the other, the residence of the Astronomer, facing south-east, about 120 yards south-west of the former, and covering a space of 75 by 50 feet. The original Observatory, built in 1792, consisted of a single room, 40 feet long by 20 broad and 15 high inside, with massive walls, over two feet in thickness. The floor rests on beams supported entirely by the walls and detached from the instrumental basement, which consists of a solid pyramidal mass of masonry, 37 feet long by 6 feet wide at its upper surface, 6 feet in depth, and 45 feet long by 12 feet broad below; probably little less firm or massive than a solid rock of similar dimensions. A conical granite pier rests on the centre of this mass, 4 feet in diameter at its base, tapering up to 2 feet at its total height of 18 feet, and weighing certainly over ten tons. This was the pier originally provided for the little 12-inch alt-azimuth by Troughton; while the small Transit by Stancliffe and the Transit-clock, both rested on granite supports

each weighing about $2\frac{1}{2}$ tons. When Mr. Taylor replaced the small instruments by the Dollond Transit and the Mural Circle, in 1830, they were fixed on stone piers, the former as far east and the latter as far to the west as the basement would allow, on opposite sides of the great central conical frustum, which was retained in position as a huge counterpoise, though no longer used as a support for any instrument.

The present Meridian Circle occupies the same position as Mr. Taylor's Transit-instrument, looking through the same slits in the roof and walls, which have however been made 22 inches wide instead of only 15 as formerly. Two brick piers were first erected for its reception, but these were condemned by Major Worster, in January 1859, and were replaced by excellent granite ones, under Major Tennant's superintendence, in 1860. Each of these piers measures $4\frac{1}{2}$ feet by 2 and rises 4 feet above the floor of the room. Four composition blocks, each $4\frac{1}{4}$ feet long by 2 wide and 2 feet 2 inches high, were sent out with the new instrument from England, and on two of these, surmounting the granite base piers, rests the Meridian Circle, with its pivot centres 6 feet 2 inches from the floor. The other two composition blocks or cap stones support the counterpoise arrangements and raise the piers to a total height of 8 feet 4 inches. The clear space between the piers for the observer is 39 inches.

Want of proper instructions, or possibly the loss of such if sent, in regard to the cap stones, caused much difficulty and delay in the erection of the instrument, as if placed in position as they were sent out, the pivots would have been built into two 12-inch square holes, inaccessible even for cleaning and oiling; while the instrument could never have been lifted so much as six inches out of its bearings, whatever alterations or repairs might at any time become necessary. Two slices of $9\frac{1}{2}$ inches thickness were accordingly cut out of the middle of each cap stone and these were afterwards found very useful in overcoming another difficulty of construction which will be described further on.

About the year 1845, when the Magnetical Establishment was removed to the Observatory, the old transit room received considerable extensions, rendered necessary for the accommodation of the additional instruments and assistants transferred to the care of the Government Astronomer. Eastward was added; first, a covered passage, 20 feet long by 8 broad, leading to the Dip-circle room, which measured 16 feet by 26 feet; next a magnetic room.

45 feet by 15 feet, in which the Bifilar, Vertical Force and Declination Magnetometers were placed and read hourly up to March 1861; and third, a small Transit-theodolite room, 16 feet by 12 feet, used in connection with the Declination Magnetometer and as a computing room for the head magnetical Assistant. About 30 feet more eastward stands a small detached room, $22\frac{1}{2}$ feet by 15 feet, used only for periodical determinations of the absolute Horizontal Force, by means of the usual deflexion apparatus supplied to all the magnetical observatories started upon the recommendation of the Royal Society in the year 1841.

Westward of the old transit room were added two small rooms, each 20 feet by 15 feet, the first being used as a computing and manuscript room and the other as a store room for instruments and other property not in actual use.

In the year 1872 three additional rooms for celestial photography were hurriedly run up on the roof over the Transit Circle room, just in time to secure photographs of the annular eclipse of the Sun on June 6th of that year. The fine silver glass nine-inch reflector by John Browning, used by Colonel J. F. Tennant, at Guntoor, on the occasion of the total solar eclipse on August 18th, 1868, having been altered, repaired and sent to Madras by the advice of the Astronomer Royal in 1871, for use at Avenashi in the Coimbatore District, during the next total eclipse which India was privileged to witness on December 12th, 1871; was afterwards brought to Madras and mounted upon the large granite conical pier before mentioned; a room, 21 feet by 15 feet, being built to enclose it. A flat sliding shutter was provided, which when rolled off westward, left a square opening of 10 feet, giving the reflector a fair command of the sky except near the horizon where it was never likely to be used for photographic purposes. Two small rooms adjoining; one dark for developing and the other for printing and other purposes, were also prepared in time for the annular eclipse in 1872. Very complete and convenient arrangements for securing celestial photographs were made, ostensibly with a view to the approaching Transit of Venus, on December 8th, 1874, and the Browning reflector was in readiness for that important event, but unfortunately cloudy weather prevented any photographs from being taken and the telescope was dismantled and sent to Calcutta, in compliance with orders from the Government of India, in February 1875.

A small portable equatorial, with a $3\frac{1}{2}$ -inch object glass by Dollond, has since been placed in the reflector-room and is occasionally used for casual

phenomena, such as eclipses or occultations, but all photographic operations were of course stopped by the removal of the reflector. The recent wonderful advances in celestial photography may render the renovation and equipment of this part of the observatory a very important step in regard to observations in the near future.

The house, originally provided for the Astronomer's use only, is a still older and more substantial building than the Observatory proper already described, and much of it is now given up for purely official purposes. It contains in all eighteen rooms; eight on the ground floor; seven on the first floor and three on the roof. The ever increasing and already valuable and extensive Library occupies two rooms on the ground floor, and in these also are placed the electrical clock and telegraphic appliances used for giving true time to the local shipping and generally to all parts of India. A granite step of the north-east door of the Library is a bench-mark of the G. T. Survey of India and is 22 feet above mean sea level. The private office of the Astronomer is immediately over the Library, and on the roof are, a small Anemograph room, $10\frac{1}{2}$ feet square; a 16-foot circular room with an excellent revolving dome, containing a fine eight-inch Equatorial by Messrs. Troughton and Simms, and another, slightly smaller but similar room, for the six-inch Equatorial by Messrs. Lerebours and Secretan, formerly used to such good purpose by Captain Jacob in measurements of double stars and of Saturn's satellites.

Photographs or drawings of the buildings and of the chief instruments were intended to have been given in this volume, but are unavoidably deferred for the present.

THE MERIDIAN CIRCLE.

This fine instrument, as already stated, was made by Messrs. Troughton and Simms, in consultation with the late Mr. R. C. Carrington, and its general excellence has proved most satisfactory. The clear aperture of the object glass is $5\frac{1}{4}$ inches and its focal length about 50 inches; the magnifying powers of the eye-pieces being very nearly as engraved on each, viz., 105, 147 and 230. The middle power has been used throughout. A Bohnenberger's eye-piece, power 106, was also supplied for determinations of the nadir point and level error.

The horizontal axis consists of a central 12-inch cube and two cones,

each ten inches in diameter at the cube and in one casting of gun-metal therewith; bearing at their extremities the pivots, also of gun-metal, which are 3 inches in diameter and rest in brass Y's, adjustable vertically only by screw-motion; any change in azimuth requiring the forcible bodily movement of the east pivot support by means of double wedges, but such adjustment has only been once needed since the instrument was finally mounted in 1862. The pivots and Y's are so well boxed in with close fitting brass covers that dust and moisture are effectually excluded.

The two ends of the telescope are each screwed to the cube by twelve stout bolts. There are two nearly similar gun-metal 42-inch circles, each firmly secured by means of eight screws to truly faced flanges, attached to the conical axes on opposite sides of the cube. The clear space between the two circles is just 30 inches. The eastern circle is coarsely divided, to 10' only, for setting, and is also intended as a handle for turning the instrument round. It is clipped by two clamps, with slow motions and tangent rods, which have generally been used for making bisections in preference to the micrometer of the eyepiece, ever a fruitful source of error in polar distance determinations. The western circle carries a rim of gold, inclined at a level of about 12° to the plane of the circle to facilitate reading and illumination, and is divided with Messrs. Troughton and Simm's well known precision into 5' spaces. The divisions are read off by six microscopes of very considerable magnifying power, so placed as to bring their micrometer eyepieces within a circle of 30 inches diameter and for the lower microscope to read zenith-distances. Each microscope micrometer screw moves a pair of close parallel wires, the nearest division of the limb being brought midway between them instead of being bisected by cross wires. The divided circle is enclosed in a light open work box to shield it from accidental injury by the observer.

The greatest source of delay and difficulty in mounting the instrument was in regard to the fixing of the six microscopes. It was obviously intended that they should be placed as they now are, for the lower one to read zenith distances, and the hole for it to look through was drilled in the lower part of the western pier in readiness. This however caused the upper microscope, in the cap-stone above, to come immediately above the flame of an argand lamp, provided for lighting up the field of view, or the wires in a dark field, and for the general illumination of the limb opposite to each microscope. It was soon found that the much smaller flame of a thin flat wick gave ample illumination for the limb and also for the wires in a bright field, though not

sufficient for the satisfactory use of bright wires in a dark field. With one of the slices cut out of the cap-stones, as mentioned on page vi, a conical frustum, of 24 inches base and 19 at its face, was attached to the western pier, projecting 6 inches from it, and with a continuation of the 12-inch square space left for the pivot supports, through its centre. By placing a small lamp therein, with a bent chimney to carry off all smoke and as much heat as possible, the difficulty was at last overcome; certainly not as arranged by Messrs. Troughton and Simms but quite effectual for the purpose. The conical projection lies between the micrometers, serving as a protection to them against possible injury, but is neither in the way nor in the least unsightly, and no one seeing the instrument for the first time would imagine for a moment that it was any addition to or departure from the original design. The light of the small lamp is guided and condensed by a frame of seven lenses; a large central one for illuminating the field, and six smaller ones for distributing it where required upon the divided limb under each microscope.

Two pairs of brass arcs had been provided for the support of the other four microscopes; one pair for the eyepieces and micrometers on the outside western face of the pier, and a larger pair, to bear the objectives on its eastern or inner side; apertures being also left in the composition stones for the long tubes connecting the eyepieces and their objectives; but in order to fix the upper microscope after cutting out a $9\frac{1}{2}$ inch slice just where it had to come, two more similar metal arcs had to be cast and made up here. Considering the difficulty of getting anything of the kind done in Madras in those times, it would have been much better for Messrs. Troughton and Simms to have sent out a skilled mechanic to assist in the erection of the instrument, but it fortunately happened, that in September, 1861, a German Mathematical Instrument maker, the late Mr. F. Doderet, was sent out by the Right Honorable, the Secretary of State for India, to start workshops for the repair of levels, theodolites, &c., for the Public Works Department, and as no place, plant or assistants were prepared for him, I was readily granted the benefit of his services for six months. Major Tenuant, when in charge of the Observatory had purchased for Government an excellent lathe, by Holtzaffel, and with it and a supply of other tools from the Arsenal, we set vigorously to work and got the Transit usable for time determinations by the end of the year, and all the modifications required in the microscope arrangements finished in May 1862, when complete observations were first steadily commenced.

Heavy counterpoises, with their fulcra resting on inch thick iron plates, crossing the cap stones, relieve the Y's of most of the weight of the instrument, by means of two pair of 5-inch friction rollers, applied to grooves on the axis between the circles and pivots; small additional weights sufficing to lift it out of its bearing for cleaning and oiling. The residual pressure of the pivots upon each Y is about 10 or 12 lbs.

A finder, 15 inches in length and $1\frac{1}{2}$ in aperture was added to the telescope, presumably for estimating the magnitudes of the brighter stars but its utility for that or any other purpose is very questionable.

The telescope eyepiece was provided with a system of seven vertical and one horizontal spider lines, moveable each way by micrometer screws of practically the same thread. The single horizontal line was replaced by a close pair, about 12" apart, and bisections have throughout been made by bringing stars exactly midway between the two when crossing the centre vertical wire. For observations of Mars especially, the estimated equality of the segments above and below, was unquestionably better than tangential contacts of a single line with either north or south limb.

For collimating, two 35-inch telescopes with $2\frac{3}{4}$ -inch object glasses, are mounted on piers, level with the centre of the Transit-circle, inside the room, and at a distance of 57 inches from the object glass of the instrument when turned to either the north or south horizon. The central cube is pierced by two 4-inch circular apertures, so that the wires in each collimator can be seen through the other when the circle reads 180° . The south collimator micrometer moves horizontally, for fixing an approximate meridian line, and the north one vertically, so as to give a nearly horizontal line for flexure determinations. Having only native assistants for observers and considering therefore that extreme simplicity would ensure the safest results, I did not adopt the Greenwich pattern of wires, but preferred simple crosses; that in the north collimator being arranged as in the sign $\times$ and that in the south collimator as a $+$, which I thought better suited to those who had to use them.

Upon my arrival at Madras I found the collimators placed outside the Observatory in small square detached rooms, twenty feet further from the Transit-circle than they now are. This was far more convenient as regarded space inside, and would have permitted of reflexion observations being taken much lower, had such been possible and urgently desirable; but I soon

found upon trial, that the passage of the visual rays through three strata of air of very unequal temperatures, caused the wires to appear so faint and tremulous that I gladly removed the collimators inside the Observatory, as Mr. Carrington's were placed at Redhill, and the result was all that could be expected or desired.

A convenient transit observing seat runs on six rollers, between the circle piers, from one collimator pier to the other; and on the instrumental basement, a foot below the boarded floor, in which are five hinged trap doors, is a railway for two moveable reflexion troughs, besides a fixed circular one, vertically below the centre of the Transit-circle, for use with the Bohnenberger eyepiece, for nadir point and level error determinations.

CLOCKS AND CHRONOGRAPH.

One of those rare and matchless old clocks, by Shelton, with a gridiron pendulum the compensation of which as nearly approaches perfection as possible, was found in India when the Observatory was first started in 1792, and is to this day by far the steadiest timekeeper in the place. It was used as the transit-clock till 1859, when it was replaced by a new one by Dent, with a mercurial pendulum, of the best modern construction, but certainly no improvement upon the old one except in its far louder and more convenient beat. Some of the mercury was accidentally spilt in setting up the new clock and though more was added to replace the missing quantity, its compensation has never yet been so satisfactory as that of the old Shelton, which has since been used with the principal Equatoreal. The performance of the Dent transit-clock has, however, been good throughout and no better could be desired as a standard sidereal regulator.

A curious old clock, by Haswall, used by Mr. Goldingham in his pendulum experiments in 1821, with a mainspring instead of a weight and a very peculiar double escapement, was formerly used with the old mural-circle and was most capricious in its daily rate. The escapement being simplified and the spring exchanged for a barrel and weight, it has been used with the smaller equatoreal since 1866, and has worked better, though never comparable to the two first named.

An excellent mean time electrical clock by Shepherd & Son, was supplied to the Observatory in 1872, and though severely criticized when under trial at the India Store Department for instruments, at Lambeth, it has worked well

enough at Madras. It transmits hourly currents, by which a time gun at Fort St. George, about three miles distant, is fired at noon and 8 p.m., and a semaphore at the Marine Office, a mile further, is dropped at 8 a.m. and 2 p.m., with as few failures as are usually made in time signals elsewhere. It also passes alternately positive and negative currents, second by second, for the control of sympathetic-clocks, one of which has been going at the Marine Office since 1879, as fairly as could be expected considering its very indifferent treatment ever since it was set up. When first received at Madras, the Shepherd clock had a magnetic contrivance for the daily rectification of its small error, as necessary in all electrical motor clocks, and this was undoubtedly the source of dissatisfaction when on its trial in London, as until it was discarded nothing could be done with the clock here. As soon however as a simple gravitation adjustment was substituted, consisting of a small brass weight of 159 grains, which when placed upon a shelf about 18 inches below the point of suspension of the pendulum makes the clock gain a hundredth of a second per minute, or lose at the same rate when placed on another shelf below the pendulum jar, all irregularities ceased and no further difficulty was experienced.

Application was made for a chronograph in 1863, chiefly with a view to carrying out telegraphic longitude operations, and for observations of Mars in opposition for investigation of the constant of solar parallax. A barrel chronograph was specified as being the only kind desired, the time marks being read off with so much more certainty, speed and convenience when in parallel rows on a single sheet than from many yards of a thin paper tape or fillet. My application received no reply at the time, but several years later a French fillet recorder was sent out; too late for the special purposes for which it was wanted and quite unsuitable, even if it had been supplied when asked for.

OBJECTS SELECTED FOR OBSERVATION WITH THE TRANSIT CIRCLE.

The objects selected for observation with the new Meridian-circle were; the brighter stars inclusive, down to the 5th magnitude; the moon and moon-culminating stars given in the Nautical Almanac; Mars and the stars observed with him at successive oppositions, on the meridian, as well as those used east and west, with the Equatoreal, for parallax investigations; minor planets in opposition, if not under the 10th magnitude; comparison stars used for differential observations of comets and planets from 1861; all known

variable stars ; zero stars for maps of those objects in hand, and as many others, not below the 9th magnitude, as time would permit, between 130° and 150° Polar Distance, as determining stars for the zones of the Southern Survey, in extension of the late Prof. Argelander's great Northern Survey, which, with that distinguished astronomer's warm approval and advice I had intended to make my chief personal labor at Madras. The very extraordinary opposition met with to this work, from a quarter whence such was least expected, partitioning out in portions to other observatories the work I had undertaken as a whole, compelled me to abandon any participation in its accomplishment at the end of 1863, after it had been fairly commenced in that year.

The refusal of European assistance, after I had been authorized to apply to Prof. Argelander and Mr. Hind to suggest for appointment any well qualified young astronomer either of them might know of as available, was a death blow to the too ambitious programme I had undertaken and an unforeseen justification for my renunciation of the Southern Survey. The local Government and its distinguished chief, Sir W. Denison R. E., had warmly supported my plea for a German or English assistant, and were so well assured of its being granted, that the plan and estimate for separate quarters in the Observatory grounds, for the accommodation of a Deputy Astronomer, were sanctioned and the foundations actually laid out, before the refusal of the promised help was received from the India Office in London. My intention was to have only a small catalogue of stars observed by the native assistants with the Meridian Circle, pending completion of the first few maps of the Southern Survey, and as soon as the approximate catalogues, similar to those of the Bonn "*Durchmusterung*" were available, to have all the stars they contained observed in zones with the new instrument, just as the "*Durchmusterung*" itself has been since dealt with by the northern observatories.

Finding that the Meridian-circle must be used by native observers only, who though good for the slow methodical processes of ordinary meridian observations, could never be entrusted with the more arduous work of zoning ; the best course was to increase the former observing list by the addition of as many anonymous stars of more than 120° Polar Distance as could be found, not less than the 8th magnitude. No star was to be observed on less than five nights and all objects of more than ordinary interest on at least ten nights, and this has been adhered to throughout, wherever possible.

OBSERVATIONS.

Observations with the Meridian Circle, the results only of which are given in this volume, were almost entirely made by three native assistants, who were as fair observers as could probably be found of their class. The first Assistant, C. Sashoo Iyengar, was scrupulously careful and accurate and was warmly commended by every Astronomer, from 1837 up to the time of his death, in March, 1863. He was succeeded by C. Ragoonatha Chary, whose better mathematical attainments and general aptitude for science, justified me and my friend, Mr. E. B. Powell, then Director of Public Instruction, and one of the greatest authorities upon the subject of Double Stars, in recommending him for the honor of election as a Fellow of the Royal Astronomical Society. The other native assistant who took part in the meridian observations was T. Moottoosawmy Pillay; also a very trusty, painstaking man. All three had used the old meridian instruments, but it was not until after more than a year's practice with the new Transit-circle that I dare trust them to determine all their own instrumental corrections in the ordinary course of the night observations; though decidedly convinced that it is far better to do so than to make special determinations and interpolate for the required dates, however steady the corrections may be. There were such evident personalities between them, that from the first I made each assistant find his own corrections; nearly always being present, until I became assured that it would be safe to entrust them with such manipulations alone. The corrections for index and run of the microscopes micrometers were, from the first, found at night, but those for inclination and collimation in the day time, until September 1863. Due allowance being made for diurnal aberration, the right ascension micrometer was set to the corrected reading for no collimation; and until April 1863, when the use of the polar distance micrometer was first considered prudent, bisections were made with the tangent rods and slow motions of the clamps. Even then it proved a very questionable step and was a fruitful source of error long after its introduction.

Observations were entered, in pencil, in convenient recording books as they were made. The standard barometer, by Newman, supplied by the Royal Society in 1841, and one of two thermometers, verified at Kow, were recorded for refraction reductions; the one used being at either a north or south window, according to the direction of the wind at the time of observation.

REDUCTION OF THE OBSERVATIONS.

These were carried out in folio day books. The originals were bound for preservation in the Observatory, but as in the tropics it seems impossible to ensure that for long, copies were made for safer deposit in England, where they may be readily available for reference whenever desirable.

The arrangement of the day books is as follows:—

Left side.—Polar Distance : 12 columns.	Right side.—Right Ascension : 17 columns.
1.—Reference Number.	1.—Reference Number.
2.—Date and Observer.	2.—Name of Object.
3.—Barometer.	3.—Number of Wires.
4.—Thermometer.	4.—Estimated Magnitudes.
5.—Name of Object.	5.—Mean of Wires:—the clock time of transit over the mean of the seven wires being meant in all cases, and every object observed over a less number being reduced thereto by the adopted intervals of the wires noted.
6.—Deduced Circle Reading:—i. e.—zenith distance counted round through south nadir and north, up to 360° ; the means of the six microscopes, corrected for index, run of micrometers, and curvature if not observed at the centre of the field.	6.—Inclination correction.
7.—Refractions, computed by " <i>Bessel's Tables</i> " as modified and expanded in an appendix to the Greenwich Observations for 1853.	7.—Collimation correction.
8.—Apparent Polar Distance, assuming the latitude as given in the Nautical Almanac; viz., $13^\circ 4' 8''.1$ north.	8.—Meridian correction.
9.—Reductions to January 1st; using the "Day Numbers" of the Nautical Almanac, and constants calculated for every star not in the N. A. list for the year.	9.—Personal equation of Observer.
10.—Mean Polar Distances of Stars.	10.—Sum of columns 6, 7, 8 and 9.
11.—Apparent Polar Distance by Ephemeris.	11.—Corrected clock time of transit.
12. Correction to Ephemeris.	12.—Clock correction applied.
	13.—Apparent Right Ascension.
	14.—Reduction to January 1st, calculated as in column 9 of the Polar Distance page.
	15.—Mean Right Ascensions of Stars.
	16.—Apparent Right Ascension by Ephemeris.
	17.—Correction to Clock or Ephemeris.

The contents of the Observing or Recording books and of the Reduction or Day books are now rarely published except at national Observatories; colonial and private Observatories seldom having either the staff or the funds required for printing such voluminous details, of questionable interest or utility to those who only desire results.

The horizontal wires were most carefully adjusted, so that a star brought exactly between them upon entering the field of view was satisfactorily so when quitting it at the opposite side and no correction was therefore required for the very few cases in which a star was not bisected close to the middle transit wire.

The value of one revolution of the Polar Distance micrometer, found by bisecting the cross of the north collimator with the close horizontal wires at different settings of the micrometer and reading off the Circle, was $26^{\circ}33'$. Measured by means of coincidences between the wires and their reflected image, it was $26^{\circ}37'$. The mean value, $26^{\circ}35'$ was adopted.

The value of one revolution of the Right Ascension micrometer, found in a similar manner, after turning the eyepiece end through 90° , until the close horizontal wires were in a vertical line and then reading off the Circle when the centre wire was made to bisect the cross of the north collimator at various readings, was $26^{\circ}66' = 1.771$ seconds of time.

The intervals of the seven wires from their mean, determined by twelve complete transits of polar stars in 1862, were as follows:—

$$+36^{\circ}979 + 24^{\circ}705 + 12^{\circ}351 + 0^{\circ}109 - 12^{\circ}348 - 24^{\circ}697 - 37^{\circ}098$$

The Madras factors for inclination and meridian corrections were found by the following formulæ; the Polar Distance being considered negative for below pole factors.

$$\text{Inclination factor} = +0.974 + (9.35435) \cotan. \text{ Polar Distance.}$$

$$\text{Meridian factor} = +0.226 - (9.98861) \cotan. \text{ Polar Distance.}$$

The correction for diurnal observation at Madras being $0^{\circ}020$, for the centre wire $+ 0^{\circ}109$, and the zero of collimation having been found by taking the mean of the R. A. micrometer readings of the centre wire, when bisecting the crosses in the north and south collimators, after they had been adjusted upon each other; we have for any other reading of the R. A. micrometer:

$$\text{Collimation correction} = 1.771 (\text{zero of coll.} - \text{adopted reading} - 0.073).$$

The reading of coincidence of the centre wire with its reflected image in mercury being taken, we have also;

$$\text{Inclination correction} = 1.771 (\text{zero of coll.} - \text{coincidence reading}).$$

The small altitude of the pole at Madras renders the observation of stars often impossible at their lower transit. Weather permitting, the Meridian-correction was found by a pair of polar stars, but frequently of necessity from one only, combined with a south star, when of course no other use was made of the observation, beyond that of furnishing the correction for the night. The correction was interpolated when not otherwise determinable.

Personal equations were merely used for the convenience of avoiding changes in the local time, for the public signals, as different observers came on duty. The watches usually extended over half a month and the clock errors were never mixed. Upon several occasions, when the instrument was in use only as a Transit, before the Circle arrangements were completed, I observed a number of clock stars intermediate between those of the native assistants, and from comparisons thus obtained, it appeared that they all required negative corrections to their recorded times relatively to my own. The numbers adopted were ; for Sashoo $-0^{\circ}.75$, for Ragoonatha $-0^{\circ}.35$, and for Moottoosawmy $-0^{\circ}.23$. I afterwards found that similar differences in the habits of bisection existed between the native observers and myself; rendering it equally necessary for each one to determine his own corrections for Index and Run, and causing apparent changes in the corrections certainly not due to the instrument, as may be readily seen in the following tables of adopted "*Instrumental Corrections*", where the numbers enclosed in brackets are the determinations of different observers on the same night.

The Nautical Almanac positions of Standard stars were used entirely for finding the clock corrections, a few being rejected for the purpose, especially Sirius and 61 Cygni. Whatever corrections are due to the Nautical Almanac stars will therefore affect the Madras Right Ascension throughout.

For the determination of the Meridian corrections, as well as with a view to securing data for correction of the assumed latitude, the positions of a number of the brighter stars in the "*Catalogue of 164 Stars within 6° of the North Pole*", given in Vol. XVI of the "*Radcliffe Observations*" were employed. I preferred using the positions given therein to those of the "*Radcliffe Catalogue of Stars for 1845*", as they were entirely my own bringing up, under the supervision of my esteemed chief Mr. Johnson, then Radcliffe

Observer, who was ever anxiously watchful for the results as the work was in progress.

A flexure correction of $1''.72 \times \sin \text{Zenith Distance}$, was applied provisionally to the Polar Distances in this volume and I regret not having awaited a final value before using such a correction at all.

Any investigation of the correction to the assumed latitude before the flexure correction is finally settled would be premature; nor do I think it will be worth while to trifle with partial year to year enquiries now that all the observations for the Catalogue are completed. There is good reason to believe that the latitude requires to be increased (Mr. Taylor used $9''.2$ instead of $8''.1$ for his "*General Catalogue for 1835*") and it will be far better to combine all observations taken of each star, above and below pole, when reduced to the epoch 1875, a work which I hope to proceed with as early as other duties will permit, while the next volume is in hand.

Instrumental Corrections adopted in 1862.

Date.	Index.	Run in 5'	Clock Rate	Inclina- tion.	Meridian.	Determining Stars.
1862.	"	"	"	"	"	
May 31	- 3.5	+ 0.7	- 0.36	0.00	+ 0.30	
June 2	- 5.0	+ 0.8	- 0.32	0.00	+ 0.53	ρ Bootis and Polaris
3	- 4.5	+ 0.8	- 0.44	0.00	+ 0.45	ρ Bootis and 34 R. P. L.
4	- 4.1	+ 0.8	- 0.46	0.00	+ 0.40	109 R. P. L. and β Corvi.
5	- 3.8	+ 0.8	- 0.34	0.00	+ 0.50	109, 111, 115 R. P. L., and ϵ , β Corvi. Spica.
7	- 4.8	+ 0.5	- 0.31	+ 0.13	+ 1.16	111 R. P. L. and α Libræ.
9	- 3.5	+ 0.5	- 0.32	- 0.08	+ 0.09	
10	- 4.0	+ 0.7	- 0.36	- 0.06	+ 0.09	ϵ Ura. Min. and Antares.
12	- 5.2	+ 0.5	- 0.42	- 0.02	+ 0.13	111 R. P. L. and Antares.

The Inclination correction was adjusted on each of the first five nights on which the instrument was used. It was afterwards determined, about noon, on June 7, 9, 12.

The Right Ascension micrometer was set to the corrected reading for no collimation, except on June 7, when it was left by mistake so as to require a correction of - 0.14 second.

Instrumental Corrections adopted in 1862.

Date	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1862	"	"	"	"	"	
June 13	- 4.6	+ 0.5	- 0.40	- 0.05	+ 0.11	
16	- 4.1	+ 0.3	- 0.38	- 0.06	+ 0.03	
19	- 3.6	+ 0.2	- 0.41	- 0.06	- 0.06	111 R. P. L. β Ura. Min. and β^1 Scorpii.
21	- 4.5	+ 1.0	- 0.36	- 0.06	+ 0.19	3 Ura. Min. and β Libræ.
24	.....	.....	- 0.23	- 0.05	+ 0.21	111 R. P. L. and α Serpentis
27	.....	.....	- 0.25	- 0.05	+ 0.18	
30	.....	.....	- 0.38	- 0.06	+ 0.13	
July 3	+ 0.3	0.0	- 0.35	+ 0.02	+ 0.11	ϵ Ura. Min. and θ Ophiuchi.
4	+ 0.3	- 0.2	- 0.34	+ 0.02	+ 0.13	δ Ura. Min. and β^1 Scorpii.
8	+ 0.1	0.0	- 0.39	+ 0.02	+ 0.07	
12	- 1.1	+ 0.2	- 0.35	- 0.05	+ 0.01	δ Ura. Min. and ρ Capricorni
15	+ 3.5	+ 0.1	- 0.33	- 0.03	+ 0.04	ϵ Ura. Min. and β^1 Scorpii
16	+ 3.9	+ 0.1	- 0.36	- 0.03	+ 0.06	
18	+ 4.1	0.0	- 0.40	- 0.02	+ 0.04	
19	+ 3.8	0.0	- 0.39	- 0.02	+ 0.03	
22	+ 2.6	0.0	- 0.33	- 0.02	0.00	
23	+ 2.7	+ 0.5	- 0.22	- 0.03	- 0.02	ϵ Ura. Min. and β^1 Scorpii.
24	+ 2.7	+ 0.5	- 0.18	- 0.01	+ 0.04	
25	+ 3.0	+ 0.3	- 0.20	- 0.01	+ 0.09	ϵ Ura. Min. and β^1 Scorpii.
26	+ 2.4	- 0.1	- 0.28	- 0.01	+ 0.06	ϵ Ura. Min. and β^1 Scorpii.
28	+ 2.4	- 0.1	- 0.56	- 0.07	+ 0.08	δ Ura. Min. and β^1 Scorpii
July 29	+ 2.5	- 0.3	- 0.53	- 0.07	+ 0.12	131 R. P. L. and δ Aquilæ
30	+ 2.7	+ 0.2	- 0.63	- 0.07	+ 0.12	
31	+ 2.4	0.0	- 0.63	- 0.07	+ 0.12	
Aug. 1	+ 2.2	0.0	- 0.12	- 0.07	+ 0.06	δ Ura. Min. and α^1 Capricorni
2	+ 2.4	- 0.1	- 0.10	- 0.07	+ 0.03	δ Ura. Min. and ϵ Ophiuchi.

The microscopes were removed on June 23, for a few days, during the fastening of a conical stone ring to the western pier, between them and the lamp.

The microscopes were re-adjusted throughout on July 3 and 15.

The Clock rate was diminished 0.5 second after the observations on July 31.

The Inclination correction was determined, usually about noon, on June 14, 17, 20, July 3, 10, 15, 21, 24 and August 4.

The Right Ascension micrometer was set to the corrected reading for no collimation, except on June 19, when by a careless mistake it was left seven revolutions wrong and a correction of - 12.40 seconds had to be used.

Instrumental Corrections adopted in 1862.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1862.	"	"	"	"	"	
Aug. 5	+ 1.9	+ 0.2	- 0.07	- 0.05	+ 0.03	
9	+ 2.2	+ 0.1	- 0.15	- 0.05	+ 0.03	
12	+ 3.5	0.0	- 0.07	- 0.12	+ 0.03	
13	+ 3.7	- 0.3	- 0.02	- 0.13	+ 0.03	
14	+ 2.3	- 0.3	- 0.10	- 0.12	+ 0.09	α Ura. Min. and α Sagittarii
16	+ 3.3	+ 0.1	- 0.26	+ 0.01	+ 0.09	
18	+ 3.2	0.0	- 0.33	+ 0.01	+ 0.09	
20	+ 4.2	0.0	- 0.52	+ 0.01	+ 0.09	δ Ura. Min. and Altair
21	+ 3.2	- 0.2	- 0.42	+ 0.01	+ 0.08	δ Ura. Min. and β Aquilæ.
22	+ 3.1	- 0.5	- 0.28	+ 0.01	+ 0.17	131 R. P. L. and δ Aquilæ
23	+ 3.2	- 0.5	- 0.28	+ 0.01	+ 0.16	150 R. P. L. and δ Aquilæ.
25	+ 2.7	- 0.5	- 0.32	- 0.09	+ 0.13	
26	+ 2.7	- 0.1	- 0.39	- 0.09	+ 0.12	
27	+ 2.8	- 0.3	- 0.35	- 0.09	+ 0.10	
28	+ 0.5	+ 0.4	- 0.27	- 0.09	+ 0.09	
Sep. 1	- 0.9	0.0	- 0.33	- 0.22	+ 0.03	
3	+ 0.3	- 0.1	- 0.36	- 0.22	0.00	
5	{ + 0.6 + 1.2 }	0.0	- 0.19	- 0.22	- 0.03	γ Aquilæ and δ Cephei.
6	+ 0.7	+ 0.4	- 0.17	- 0.26	+ 0.02	150 and 72 R. P. L.
8	+ 1.5	+ 0.2	- 0.30	- 0.23	+ 0.02	
9	+ 1.8	+ 0.2	- 0.21	- 0.23	+ 0.02	
10	+ 1.1	+ 0.1	- 0.24	- 0.23	+ 0.01	12 and 89 R. P. L.
11	+ 0.7	+ 0.2	- 0.38	- 0.23	+ 0.01	
12	+ 0.2	+ 0.1	- 0.39	- 0.23	+ 0.01	
13	+ 0.9	+ 0.1	- 0.40	- 0.23	+ 0.01	
15	+ 0.9	+ 0.1	- 0.32	- 0.21	+ 0.01	
16	+ 0.4	0.0	- 0.35	- 0.22	+ 0.01	

The two brass arcs which support microscopes B and C were removed for necessary alterations and repair of a broken screw on August 28.

The Inclination correction was determined, usually about noon, on August 11, 16, 25, 29, September 1, 2, 4, 8, 16.

The Right Ascension micrometer was set to the corrected reading for no collimation except on September 1 when it was slightly misplaced, leaving a correction of + 0.02 second, and also on September 3 and 5, when the required correction was + 0.01 second.

Instrumental Corrections adopted in 1862.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars
1862.	"	"	"	"	"	
Sep. 17	+0.6	+0.2	-0.23	-0.22	+0.02	
18	0.0	+0.2	-0.12	-0.22	+0.02	
20	0.0	+0.2	-0.32	-0.22	+0.02	
22	+1.8	+0.2	-0.01	-0.31	+0.02	151 R. P. L. and 12 Ceti
23	+1.7	0.0	+0.02	-0.22	+0.02	
24	+1.7	+0.3	-0.26	-0.22	+0.02	
26	+2.8	+0.1	-0.73	-0.26	+0.03	
27	+2.3	-0.3	-0.73	-0.26	+0.03	
29	+2.5	-0.3	-0.77	-0.26	+0.03	150 R. P. L. and β Aquarii
30	+2.9	+0.8	-0.81	-0.26	+0.02	150, 158 R. P. L., and ρ Capricorni
Oct. 1	+0.8	+0.2	-0.80	-0.31	+0.03	
2	+1.2	+0.3	-0.76	-0.31	+0.04	150 and 72 R. P. L.
3	+1.6	-0.2	-0.76	-0.31	+0.03	
4	+1.1	0.0	+0.27	-0.31	+0.03	
6	+0.8	+0.5	+0.14	-0.31	-0.01	150 R. P. L. and ϵ Piscium
7	+0.8	-0.4	+0.22	-0.31	+0.03	150 and 70 R. P. L.
8	+0.8	0.0	+0.20	-0.27	+0.03	
9	+0.6	-0.2	+0.12	-0.27	+0.03	
10	+2.2	-0.2	+0.24	-0.27	+0.03	
11	+1.6	+0.1	+0.27	+0.11	-0.03	150 R. P. L. and γ Pegasi
13	+1.5	+0.1	+0.17	+0.11	-0.03	150 and 72 R. P. L.
14	+1.7	-0.1	+0.20	+0.11	-0.04	150 R. P. L. and α Aquarii
15	+1.8	+0.1	+0.26	+0.11	+0.01	150 and 72 R. P. L.
16	+1.6	0.0	+0.17	+0.10	-0.06	150 and 72 R. P. L.
17	+2.0	+0.4	+0.12	+0.10	-0.06	
18	+1.3	+0.3	+0.13	+0.10	-0.07	
20	+1.7	+0.3	+0.17	+0.10	-0.08	
21	+1.2	0.0	+0.17	+0.10	-0.09	Polaris and δ Sculptoris

The Clock rate was diminished by 1 second after the observations on October 3.

The inclination correction was determined, usually about noon, on September 24, 26, October 8, 11, 16.

It was adjusted on October 4.

The Right Ascension in the meridian was set to the corrected reading for no correction before beginning to observe.

Instrumental Corrections adopted in 1862.

Date.	Index.	Run in 5'	Clock Rate	Inclina- tion	Meridian	Determining Stars
1862.	"	"	"	"	"	
Oct. 23	+ 1.1	- 0.1	+ 0.11	+ 0.13	- 0.07	Polaris and δ Sculptoris.
24	+ 1.0	- 0.1	+ 0.11	+ 0.13	- 0.07	
25	+ 0.3	+ 0.1	- 0.01	+ 0.13	- 0.06	
27	+ 0.8	+ 0.2	- 0.35	+ 0.13	- 0.05	
28	- 0.5	+ 0.2	- 0.19	+ 0.13	- 0.05	153 and 79 R. P. L.
29	.....	.....	- 0.01	+ 0.13	- 0.02	
31	+ 2.1	+ 0.4	+ 0.01	+ 0.13	+ 0.04	26 R. P. L. and β Ceti.
Nov. 1	+ 3.1	+ 0.6	+ 0.05	+ 0.09	+ 0.09	ω Piscium and 72 R. P. L.
3	+ 3.3	+ 0.5	+ 0.06	+ 0.09	+ 0.11	153 and 72 R. P. L.
4	+ 3.2	+ 0.1	+ 0.08	+ 0.09	+ 0.14	153 and 93 R. P. L.
5	+ 3.0	+ 0.1	+ 0.02	+ 0.09	+ 0.12	153 and 72 R. P. L.
6	+ 3.1	+ 0.6	+ 0.07	+ 0.09	+ 0.17	153 and 72 R. P. L.
7	+ 2.4	- 0.2	+ 0.00	+ 0.09	+ 0.07	26 and 89 R. P. L.
8	+ 1.7	0.0	- 0.11	+ 0.09	+ 0.13	26 and 103 R. P. L.
11	+ 0.6	+ 0.5	- 0.03	+ 0.09	+ 0.21	153 and 72 R. P. L.
12	+ 1.4	+ 0.5	+ 0.03	+ 0.09	+ 0.12	150 and γ Piscium.
13	+ 1.9	+ 0.4	+ 0.03	+ 0.06	+ 0.16	150 and 72 R. P. L.
14	+ 1.3	- 0.3	- 0.01	+ 0.06	+ 0.09	Polaris and θ Aquarii.
15	0.0	- 0.3	- 0.04	+ 0.06	- 0.01	26 and 92 R. P. L.
20	+ 1.3	- 0.3	- 0.28	+ 0.13	+ 0.09	Polaris and β Ceti.
22	+ 3.1	- 0.3	- 0.24	+ 0.13	+ 0.11	
24	+ 4.5	- 0.3	- 0.12	+ 0.13	+ 0.12	
25	+ 3.7	- 0.1	- 0.13	+ 0.13	+ 0.13	Polaris and γ Ceti.
26	+ 3.1	- 0.4	- 0.18	+ 0.13	+ 0.13	
28	+ 4.4	- 0.4	- 0.18	+ 0.14	+ 0.13	12 R. P. L. and θ Ceti.
29	+ 4.6	- 0.3	- 0.08	+ 0.14	+ 0.14	
Dec. 1	+ 2.1	- 0.3	- 0.10	+ 0.17	+ 0.18	33 and 89 R. P. L.
2	+ 2.2	- 0.2	- 0.17	+ 0.17	+ 0.10	33 and 114 R. P. L.

The inclination correction was determined, usually about noon, on October 23, November 1, 14, 17, 29 and December 1.

The Right Ascension micrometer was set to the corrected reading for no collimation before beginning to observe.

Instrumental Corrections adopted in 1862.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1862.	"	"	s	s	s	
Dec. 3	+ 1.8	+ 0.4	- 0.17	+ 0.17	+ 0.11	Polaris and ν Piscium
4	+ 1.9	+ 0.3	- 0.23	+ 0.17	+ 0.18	α Arietis and ϵ Urs. Min.
5	+ 1.1	+ 0.3	- 0.28	+ 0.17	+ 0.14	10 R. P. L. and β Ceti.
6	+ 0.8	+ 0.2	- 0.33	+ 0.17	+ 0.16	
8	- 0.1	+ 0.2	- 0.39	+ 0.17	+ 0.20	40 R. P. L. and ϵ Urs. Min.
9	- 0.1	+ 0.4	- 0.34	+ 0.17	+ 0.21	43 R. P. L. and ϵ Urs. Min.
10	+ 0.2	+ 0.4	- 0.24	+ 0.17	+ 0.15	26 R. P. L. and γ Ceti.
11	+ 0.6	+ 0.1	- 0.25	+ 0.17	+ 0.18	Polaris and α Arietis.
20	.....	.....	- 0.37	+ 0.12	+ 0.18	
25	... ..	.. .....	- 0.31	+ 0.12	+ 0.19	
29	.....	.....	- 0.30	+ 0.12	+ 0.20	33 R. P. L. and 67 Ceti.
31	.....	.....	- 0.37	+ 0.04	+ 0.22	33 R. P. L. and 67 Ceti.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1863.	"	"	s	s	s	
Jan. 3	.. .....	.....	- 0.32	+ 0.14	+ 0.18	
5	+ 2.5	0.0	- 0.30	+ 0.14	+ 0.15	
6	+ 0.8	+ 0.2	- 0.23	+ 0.14	+ 0.13	43 R. P. L. and γ Eridani
7	+ 0.4	+ 0.1	- 0.27	+ 0.14	+ 0.08	Procyon and δ Urs. Min.
8	+ 1.1	+ 0.2	- 0.35	+ 0.14	+ 0.16	33 R. P. L. and γ Eridani.
9	+ 1.1	- 0.4	- 0.60	+ 0.14	+ 0.16	33 R. P. L. and δ Urs. Min.
10	+ 1.0	- 0.4	- 0.76	+ 0.14	+ 0.11	33 R. P. L. and δ Urs. Min.
12	.....	.....	- 0.37	+ 0.14	+ 0.10	
14	- 1.3	+ 0.3	- 0.31	+ 0.16	+ 0.08	35 R. P. L. and δ Orionis.
15	- 1.6	+ 0.3	- 0.38	+ 0.16	+ 0.31	34 R. P. L. and ϵ Eridani.

The inclination correction was determined about noon on December 18, 16, 30 in 1862 and also on January 15, 1863.

The Right Ascension micrometer was set to the corrected reading for no collimation before beginning to observe.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars
1863.	"	"	s	s	s	
Jan. 16	$\begin{Bmatrix} -1.3 \\ -0.9 \end{Bmatrix}$	$\begin{Bmatrix} +0.1 \\ -0.1 \end{Bmatrix}$	-0.45	+0.15	+0.24	33 R. P. L. and Rigel.
17	-1.1	+0.4	-0.40	+0.15	+0.21	
19	-1.2	+0.3	-0.21	+0.15	+0.15	51 Cephei and δ Urs. Min.
20	-1.2	+0.2	-0.22	+0.15	+0.14	51 Cephei and δ Urs. Min.
21	-2.1	+0.2	-0.18	+0.16	+0.10	
22	-2.1	0.0	-0.20	+0.16	+0.07	51 Cephei and α Columba.
23	0.0	+0.1	-0.30	+0.17	+0.06	
24	+0.6	0.0	-0.31	+0.17	+0.06	51 Cephei and 131 R. P. L.
29	+2.0	+0.1	-0.24	+0.19	+0.06	51 Cephei and Rigel.
30	+2.0	+0.3	-0.24	+0.20	+0.04	
Feb. 2	+2.5	$\begin{Bmatrix} +0.4 \\ -0.3 \end{Bmatrix}$	-0.46	+0.22	-0.02	70 and 150 R. P. L.
3	+2.0	+0.1	-0.42	+0.22	+0.05	51 Cephei and δ Urs. Min.
4	+2.3	+0.2	-0.32	+0.22	+0.10	Pollux and λ Urs. Min.
5	+1.4	+0.1	-0.27	+0.22	+0.04	77 R. P. L. and ϵ Hydre.
6	+1.2	0.0	-0.23	+0.22	+0.13	ϵ Leonis and 150 R. P. L.
9	+1.2	+0.1	-0.08	+0.22	+0.05	51 Cephei and δ Urs. Min.
10	+1.3	0.0	-0.11	+0.22	+0.04	
11	+0.7	0.0	-0.15	+0.22	+0.03	51 Cephei and δ Urs. Min.
12	+1.0	0.0	-0.09	+0.23	+0.02	
13	+1.4	0.0	-0.08	+0.23	0.00	Castor and δ Urs. Min.
14	+1.0	+0.3	-0.11	+0.23	0.00	
16	+1.1	+0.2	-0.14	+0.24	-0.01	
17	+0.5	+0.3	-0.11	+0.24	-0.01	51 Cephei and δ Urs. Min.
18	+0.3	+0.1	-0.23	+0.24	-0.01	
19	.....	.....	-0.31	+0.24	-0.01	
21	+0.5	+0.1	-0.33	+0.25	-0.01	

The inclination correction was determined, between noon and 3 p.m., on January 16, 31 February 2, 8, 13.
 The Right Ascension micrometer was set to the corrected reading for no collimation, except on January 16, when the observer during the second part of the night slightly misplaced it, leaving a correction of +0.01 second.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars
1863.	"	"	s	s	s	
Feb. 23	-0.6	+0.1	-0.30	+0.25	-0.01	51 Cephei and γ Ori.
24	-1.5	0.0	-0.36	+0.24	0.00	
25	-1.2	+0.1	-0.35	+0.24	+0.02	Pollux and λ Urs. Min.
26	-1.1	+0.1	-0.31	+0.23	+0.03	
27	-1.2	+0.2	-0.17	+0.23	+0.05	60 R. P. L. and λ Urs. Min.
28	-1.3	+0.2	-0.16	+0.22	+0.02	
Mar. 2	$\left\{ \begin{array}{l} -0.3 \\ -0.2 \\ +0.3 \end{array} \right\}$	$\left\{ \begin{array}{l} -0.1 \\ +0.9 \\ -0.1 \end{array} \right\}$	-0.22	+0.21	-0.03	51 Cephei and δ Urs. Min.
3	-0.5	+0.1	-0.19	+0.22	0.00	70 R. P. L. and λ Urs. Min.
4	-1.0	-0.3	-0.24	+0.22	0.00	Procyon and λ Urs. Min.
5	-0.7	+0.4	-0.22	+0.23	-0.04	60 R. P. L. and λ Urs. Min.
6	-1.3	+0.3	-0.21	+0.24	-0.05	
7	-1.3	+0.2	-0.36	+0.26	-0.06	70 R. P. L. and Spica.
9	-1.0	+0.3	-0.36	+0.28	-0.04	60 and 150 R. P. L.
11	-0.4	+0.2	-0.18	+0.31	-0.00	
12	-0.6	+0.1	-0.32	+0.32	-0.11	72 and 131 R. P. L.
13	-0.8	+0.1	-0.32	+0.32	-0.11	
14	-0.7	-0.3	+0.30	+0.32	-0.11	
15	.....	.....	+0.30	+0.27	-0.11	
16	-0.3	+0.3	+0.09	+0.32	-0.10	
17	-0.4	0.0	-0.05	+0.32	-0.09	60 R. P. L. and ϵ Hydr.
18	0.0	-0.3	+0.06	+0.32	-0.11	60 and 150 R. P. L.
19	-0.1	-0.1	-0.21	+0.32	-0.11	
20	-0.8	0.0	-0.37	+0.33	-0.13	89 and 158 R. P. L.
21	-0.8	+0.2	+0.03	+0.33	-0.13	
22	-1.0	+0.2	+0.06	+0.33	-0.13	80 and 158 R. P. L.
23	-1.1	+0.2	-0.03	+0.33	-0.14	
26	-1.0	+0.2	-0.09	+0.33	-0.16	80 and 158 R. P. L.

The Clock tripped two seconds in winding on March 14th. Stopped it and adjusted the pendulum.
The Inclination correction was determined, between noon and 5 p.m. on February 23, March 2, 4, 12, 20.
The Right Ascension micrometer was set to the corrected reading for the estimation before beginning
to observe.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1863.	"	"	"	"	"	
Mar 27	-1.6	+0.3	-0.10	+0.32	-0.15	
28	-1.0	+0.3	-0.13	+0.32	-0.14	89 and 158 R. P. L.
30	-1.0	+0.2	-0.20	+0.32	-0.14	
31	-0.6	+0.2	-0.12	+0.32	-0.13	89 and 158 R. P. L.
Apl. 1	$\begin{Bmatrix} -0.9 \\ 0.0 \\ -0.3 \end{Bmatrix}$	$\begin{Bmatrix} +0.3 \\ +0.5 \\ +0.3 \end{Bmatrix}$	-0.07	+0.33	-0.14	3 Virginis and Polaris.
4	.....	.....	0.00	+0.33	-0.18	
6	.....	.....	-0.01	+0.33	-0.19	
8	-1.2	-0.1	-0.07	-0.04	-0.21	70 R. P. L. and Polaris.
9	-1.1	+0.1	-0.12	-0.01	-0.19	
10	-2.1	+0.3	-0.11	+0.02	-0.17	70 R. P. L. and Polaris.
11	-1.7	+0.4	-0.07	+0.02	-0.18	
13	-1.0	-0.2	-0.17	+0.02	-0.19	70 R. P. L. and Polaris.
14	-1.0	-0.3	-0.14	+0.02	-0.17	
15	-1.7	-0.2	-0.22	+0.03	-0.15	70 R. P. L. and Polaris.
16	-1.2	+0.3	-0.20	+0.04	-0.15	
17	-1.3	-0.2	-0.16	+0.04	-0.16	1 Leonis and Polaris.
18	-1.3	+0.3	-0.14	+0.05	-0.15	
23	-0.4	+0.3	-0.30	+0.06	-0.12	89 and 159 R. P. L.
27	+0.8	-0.6	-0.24	+0.07	-0.08	89 R. P. L. and 3 Crateris.
28	$\begin{Bmatrix} +0.4 \\ +2.2 \end{Bmatrix}$	$\begin{Bmatrix} -0.6 \\ +0.5 \end{Bmatrix}$	-0.05	+0.07	-0.05	Regulus and Polaris.
29	+0.1	-0.6	-0.01	+0.07	-0.08	
30	+0.6	-0.6	-0.17	+0.08	-0.11	72 and 150 R. P. L.
May 1	$\begin{Bmatrix} -0.1 \\ +1.8 \end{Bmatrix}$	$\begin{Bmatrix} -0.6 \\ +0.5 \end{Bmatrix}$	-0.17	+0.08	-0.14	
2	$\begin{Bmatrix} +0.7 \\ +1.7 \end{Bmatrix}$	$\begin{Bmatrix} -0.6 \\ +0.5 \end{Bmatrix}$	-0.13	+0.08	-0.16	89 and 158 R. P. L.
4	0.0	+0.4	-0.44	+0.07	-0.14	

The eye-end of the telescope was removed on April 7, to have the polar distance micrometer repaired by Mr. F. Doderet. The collimators and the inclination correction were adjusted.

The Inclination correction was determined, between 2 and 7 p.m., on March 31, April 1, 7, 10, 15, 16 and May 1.

The Right Ascension micrometer was set to the corrected reading for no collimation before beginning to observe.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars.
1863	"	"	s	s	s	
May 5	+0.6	+0.4	-0.35	+0.07	-0.13	
6	-0.1	+0.2	-0.17	+0.07	-0.12	89 R. P. L. and δ Crateris.
7	-0.1	-0.1	-0.27	+0.07	-0.14	
8	+0.4	0.0	-0.21	+0.07	-0.15	
9	-0.4	0.0	-0.14	+0.06	-0.17	111 R. P. L. and Polaris.
11	+0.6	-0.1	-0.18	+0.06	-0.18	
12	+1.2	0.0	-0.21	+0.06	-0.18	
15	0.0	-0.3	-0.13	+0.05	-0.20	
16	+3.4	+0.2	-0.16	+0.04	-0.20	
18	+4.0	+0.2	-0.29	+0.03	-0.21	5 Virginis and Polaris.
19	+3.5	+0.2	-0.47	+0.03	-0.21	108 R. P. L. and Polaris.
20	+3.0	+0.2	-0.44	+0.04	-0.20	
21	+2.9	+0.2	-0.27	+0.04	-0.19	
22	+2.9	+0.2	-0.34	+0.05	-0.18	
23	+3.2	+0.2	-0.29	+0.05	-0.16	
26	+2.9	+0.2	-0.14	+0.06	-0.13	99 R. P. L. and Polaris
27	+2.8	+0.2	-0.20	+0.07	-0.12	
28	+2.2	+0.2	-0.28	+0.07	-0.12	ϵ Bootis and 35 R. P. L.
29	+2.5	+0.2	-0.32	+0.08	-0.16	
30	+2.6	+0.2	-0.31	+0.08	-0.19	β and ζ Urs. Min. and β^1 Scorpii.
June 1	+2.0	+0.2	-0.18	+0.09	-0.06	99 R. P. L. and β Corvi.
2	+2.4	+0.2	-0.18	+0.09	-0.06	ρ Bootis and Polaris
3	+2.4	+0.2	-0.16	+0.09	-0.11	
4	+1.5	+0.2	-0.15	+0.09	-0.19	ϵ Urs. Min. and ρ Capricorni.
5	+1.9	+0.2	-0.22	+0.08	-0.14	
8	+2.5	+7.2	+0.11	+0.08	-0.06	ϵ Urs. Min. and Polaris, 10 R. P. L.
10	+1.6	+0.2	+0.13	+0.08	-0.06	109 R. P. L. and Polaris.

The microscopes were adjusted on May 16.

The Inclination correction was determined, between 3 and 4 p.m., on May 16, 18 and June 1.

The Right Ascension micrometer was set to the corrected reading for no collimation before beginning to observe.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Meridian.	Determining Stars
1863.	"	"	"	"	"	
June 11	+ 1.6	+ 0.2	+ 0.04	+ 0.08	- 0.06	3 Urs. Min. and Polaris.
18	+ 2.0	+ 0.2	- 0.12	+ 0.07	- 0.09	
20	+ 1.2	+ 0.2	- 0.12	+ 0.06	- 0.10	
23	+ 1.3	+ 0.2	- 0.06	+ 0.05	- 0.11	
26	+ 1.2	+ 0.2	- 0.11	+ 0.04	- 0.13	
27	+ 0.6	+ 0.2	- 0.19	+ 0.03	- 0.13	ϵ Urs. Min. and β Libræ.
29	+ 1.8	+ 0.2	- 0.27	+ 0.03	- 0.03	δ Urs. Min. and ζ Cephei.
30	+ 1.3	+ 0.2	- 0.06	+ 0.02	- 0.05	116 R. P. L., ϵ Urs. Min. and α Ophiuchi.
July 1	+ 0.5	- 0.2	- 0.02	+ 0.02	- 0.05	
2	+ 0.4	- 0.2	- 0.09	+ 0.03	0.00	δ Urs. Min. and α^2 Capricorni.
3	+ 0.1	- 0.2	- 0.04	+ 0.04	0.00	
10	+ 0.8	- 0.2	- 0.08	+ 0.09	0.00	131 R. P. L. and α^3 Libræ.
11	+ 1.0	- 0.2	- 0.06	+ 0.10	0.00	
13	+ 1.2	- 0.2	+ 0.07	+ 0.12	0.00	
14	+ 0.9	0.0	+ 0.07	+ 0.12	0.00	
16	+ 2.6	0.0	+ 0.17	+ 0.13	+ 0.01	
18	+ 2.8	0.0	+ 0.09	+ 0.11	+ 0.01	
20	+ 3.1	0.0	- 0.16	+ 0.09	+ 0.01	ϵ , δ Urs. Min. and θ Ophiuchi.
23	+ 3.8	0.0	- 0.11	+ 0.06	0.00	
28	+ 2.5	0.0	- 0.11	+ 0.02	- 0.02	
29	+ 2.8	0.0	- 0.10	+ 0.01	- 0.03	ϵ Urs. Min. and α Pavonis.
31	+ 2.7	0.0	- 0.06	- 0.01	- 0.03	δ Urs. Min. and 72 R. P. L.
Aug. 3	+ 2.0	- 0.2	+ 0.04	- 0.04	- 0.04	
7	+ 1.9	- 0.2	- 0.08	- 0.07	- 0.05	
12	+ 1.7	- 0.2	- 0.19	- 0.10	- 0.06	131 R. P. L. and μ Sagittarii.
15	+ 1.9	- 0.2	- 0.11	- 0.11	- 0.05	
18	+ 2.3	+ 0.4	- 0.05	- 0.11	- 0.04	150 and 73 R. P. L.
23	+ 2.0	+ 0.4	- 0.02	- 0.05	- 0.10	δ Urs. Min. and λ^3 Sagittarii.

The Inclination correction was determined, between 2 and 4 p.m., on June 10, July 1, 16, August 1, 10, 17, 22.

The Right Ascension micrometer was set to the corrected reading for no collimation before beginning to observe.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars
1863	"	"	"	"	"	"	
Aug. 24	+ 2.5	+ 0.4	+ 0.03	- 0.06	0.00	- 0.03	δ , λ Urs. Min., 131 R. P. L. and 60 R. P. L.
26	+ 2.3	+ 0.4	+ 0.06	- 0.07	0.00	- 0.04	
27	+ 2.4	+ 0.4	+ 0.09	- 0.08	0.00	- 0.04	150 R. P. L., λ Urs. Min. and ρ Capricorn.
28	+ 2.0	- 0.2	- 0.01	- 0.06	0.00	0.00	
29	+ 2.4	+ 0.4	- 0.14	- 0.09	0.00	+ 0.03	Polaris and 89 R. P. L.
31	+ 2.0	+ 0.4	- 0.10	- 0.10	0.00	+ 0.01	
Sep. 4	+ 2.0	- 0.2	- 0.16	- 0.10	0.00	- 0.04	
8	+ 2.2	- 0.2	- 0.34	- 0.10	0.00	- 0.06	
12	+ 2.1	- 0.2	- 0.38	- 0.11	0.00	- 0.13	λ Urs. Min. and β Aquarii.
14	+ 1.9	- 0.2	- 0.25	- 0.11	0.00	- 0.03	131 and 60 R. P. L.
15	+ 1.9	- 0.2	- 0.26	- 0.11	0.00	- 0.03	
18	+ 2.1	0.0	- 0.25	- 0.11	0.00	- 0.01	
23	+ 2.4	0.0	- 0.14	- 0.11	0.00	- 0.05	
25	+ 1.6	0.0	- 0.12	- 0.11	0.00	- 0.05	150, 151 R. P. L. and γ Aquarii.
26	+ 1.6	0.0	- 0.19	- 0.16	- 0.03	- 0.05	
28	+ 1.7	0.0	- 0.29	- 0.13	0.00	- 0.06	158 and 89 R. P. L.
30	+ 2.1	0.0	- 0.31	- 0.09	+ 0.05	- 0.06	
Oct. 1	+ 1.2	- 0.2	- 0.17	- 0.03	+ 0.06	- 0.05	
2	+ 1.1	- 0.2	- 0.13	+ 0.01	0.00	- 0.05	
3	+ 1.2	- 0.2	- 0.26	- 0.08	- 0.02	- 0.05	
5	+ 1.0	- 0.2	- 0.16	- 0.06	- 0.01	- 0.04	
6	+ 0.6	0.2	- 0.09	- 0.07	- 0.02	- 0.04	142 and 60 R. P. L.
7	+ 0.8	- 0.2	- 0.11	- 0.12	- 0.03	- 0.03	
8	+ 0.5	- 0.2	- 0.17	- 0.11	- 0.03	- 0.03	150 R. P. L., 24 Capricorn and ρ Capricorn.

The Inclination correction was determined, between 2 and 4 p.m. on August 31, Sep. 16, 24.

The Right Ascension micrometer was set to the corrected reading for no correction, before beginning to observe, up to September 25.

The Inclination and Collimation and corrections were determined each night, during observing hours, by the Assistant on duty, from September 26, the Meridian distance and sidereal time were available.

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars.
1863.	"	"	"	"	"	"	
Oct. 9	+ 10	- 0.2	- 0.14	- 0.10	- 0.02	0.00	
10	+ 0.6	- 0.2	- 0.08	- 0.07	- 0.02	0.02	150 and 70 R. P. L.
13	+ 0.4	- 0.2	+ 0.04	- 0.01	0.00	0.00	
14	+ 1.0	- 0.2	- 0.12	- 0.17	- 0.06	0.00	
16	+ 4.2	+ 0.2	- 0.31	- 0.19	- 0.05	0.00	150 R. P. L. and Fomal- haut.
17	+ 4.3	+ 0.2	- 0.23	- 0.23	- 0.05	+ 0.03	158 and 99 R. P. L.
23	+ 8.0	+ 0.2	- 0.26	- 0.31	- 0.05	+ 0.16	150 and 69 R. P. L.
24	+ 8.3	+ 0.2	- 0.26	- 0.25	- 0.02	+ 0.16	
26	+ 8.7	+ 0.2	- 0.31	- 0.23	- 0.01	+ 0.16	Polaris and δ Sculptoris.
27	+ 8.1	+ 0.2	- 0.32	- 0.18	- 0.01	+ 0.16	Polaris and 108 R. P. L.
28	+ 8.0	+ 0.2	- 0.28	- 0.16	- 0.02	+ 0.16	
29	+ 6.7	+ 0.2	- 0.49	- 0.12	- 0.01	+ 0.15	
30	+ 6.3	+ 0.2	- 0.59	- 0.14	+ 0.01	+ 0.15	
31	+ 6.0	+ 0.2	- 0.41	- 0.16	- 0.02	+ 0.14	153 and 89 R. P. L.
.							
Nov. 2	+ 6.1	- 0.2	- 0.28	- 0.12	+ 0.02	+ 0.22	150 and 72 R. P. L.
3	+ 4.8	- 0.2	- 0.43	- 0.20	- 0.02	+ 0.27	
4	+ 4.8	- 0.2	- 0.44	- 0.11	+ 0.04	+ 0.33	150 and 89 R. P. L.
5	+ 4.1	- 0.2	- 0.50	- 0.17	- 0.01	+ 0.23	γ Piscium and 92 R. P. L.
6	+ 5.2	- 0.2	- 0.59	- 0.15	+ 0.04	+ 0.21	
7	+ 2.8	- 0.2	- 0.41	- 0.12	+ 0.05	+ 0.20	
9	+ 2.8	- 0.2	- 0.33	- 0.19	- 0.02	+ 0.17	158 and 108 R. P. L.
11	+ 2.9	- 0.2	- 0.39	- 0.18	- 0.06	+ 0.14	
13	+ 2.5	- 0.2	- 0.20	- 0.13	- 0.01	+ 0.11	
14	+ 2.8	- 0.2	- 0.16	- 0.20	- 0.06	+ 0.10	26 and 89 R. P. L.
18	+ 2.2	+ 0.2	- 0.29	- 0.17	- 0.03	+ 0.03	Polaris and Achernar
20	+ 3.4	+ 0.2	- 0.41	- 0.23	- 0.10	+ 0.04	
21	+ 2.6	+ 0.2	- 0.44	- 0.18	- 0.03	+ 0.03	35 and 116 R. P. L.
23	+ 2.5	+ 0.2	- 0.36	- 0.24	- 0.05	+ 0.12	
24	+ 3.0	+ 0.2	- 0.44	- 0.20	- 0.03	+ 0.15	

Instrumental Corrections adopted in 1863.

Date.	Index.	Run in 5.'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Star.
1863.	"	"	"	"	"	"	
Nov. 25	+ 2.1	+ 0.2	- 0.42	- 0.17	- 0.03	+ 0.19	26, 34 R. P. L. and γ^1 Eridani.
26	+ 2.0	+ 0.2	- 0.36	- 0.19	- 0.01	+ 0.15	26, 34 and 116 R. P. L.
27	+ 1.6	+ 0.2	- 0.41	- 0.22	0.00	+ 0.11	
28	+ 1.6	+ 0.2	- 0.43	- 0.20	+ 0.01	+ 0.07	
30	+ 1.4	+ 0.2	- 0.49	- 0.27	- 0.06	0.00	Polaris and Achernar.
Dec. 7	+ 6.0	- 0.2	- 0.72	- 0.06	- 0.02	+ 0.33	33 and 103 R. P. L.
8	+ 6.2	- 0.2	- 0.55	- 0.05	+ 0.01	+ 0.32	40 and 67 R. P. L.
9	+ 6.1	- 0.2	- 0.48	- 0.11	- 0.04	+ 0.30	
10	+ 5.0	- 0.2	- 0.50	- 0.15	+ 0.03	+ 0.27	
11	+ 5.1	- 0.2	- 0.40	- 0.18	+ 0.01	+ 0.25	35 R. P. L. and 67 Ceti.
12	+ 3.8	- 0.2	- 0.39	- 0.22	+ 0.01	+ 0.21	Polaris and 111 R. P. L.
14	+ 4.8	- 0.2	- 0.43	- 0.19	+ 0.01	+ 0.19	
15	+ 3.5	- 0.2	- 0.49	- 0.23	- 0.02	+ 0.13	33 and 114 R. P. L.
16	+ 3.2	+ 0.2	- 0.54	- 0.23	- 0.05	+ 0.13	
17	+ 4.9	+ 0.3	- 0.52	- 0.27	- 0.06	+ 0.08	Polaris and 111 R. P. L.
18	+ 3.5	+ 0.2	- 0.56	- 0.28	- 0.06	+ 0.10	
19	+ 2.9	+ 0.2	- 0.53	- 0.28	- 0.05	+ 0.13	
21	+ 3.2	+ 0.2	- 0.62	- 0.21	- 0.02	+ 0.13	
22	+ 2.8	+ 0.2	- 1.34	- 0.22	- 0.02	+ 0.20	Polaris and Achernar.
23	+ 2.6	+ 0.2	- 1.53	- 0.14	+ 0.02	+ 0.17	35 and 111 R. P. L.
24	+ 2.9	+ 0.2	- 0.90	- 0.20	- 0.01	+ 0.17	
25	+ 2.5	+ 0.2	- 0.66	- 0.21	- 0.02	+ 0.18	
26	+ 2.9	+ 0.2	- 0.63	- 0.18	- 0.01	+ 0.17	
29	+ 2.7	- 0.2	- 0.57	- 0.13	- 0.01	+ 0.16	
30	+ 1.9	- 0.2	- 0.62	- 0.21	- 0.01	+ 0.16	
31	+ 0.9	- 0.2	- 0.62	- 0.17	+ 0.02	+ 0.15	

Sudden and considerable changes in the Index, Inclination and Meridian corrections usually occur after heavy rain, instances of which may be seen after October 14th and November 20th in the preceding table. Buildings resting upon massive foundations like the Observatory are upheaved as a block and slightly tilted, slowly recovering their positions as the rain leaves the sandy soil, by drainage and evaporation. Where the foundations are less solid, cracked walls and too frequent collapses are the familiar results of a heavy down-pour, as may be noticed after every rainy season in Madras.

Instrumental Corrections adopted in 1864.

Date	Index	Run in 5'	Clock Rate	Inclina- tion.	Collima- tion.	Meridian	Determining Stars.
1864.	"	"	"	"	"	"	
Jan 1	+ 1.0	- 0.1	- 0.59	- 0.17	+ 0.01	+ 0.15	
2	+ 0.4	- 0.1	- 0.59	- 0.16	+ 0.04	+ 0.15	Polaris and θ Ceti.
4	+ 0.6	- 0.1	- 0.43	- 0.23	- 0.04	+ 0.08	β and 116 R. P. L.
5	+ 0.1	- 0.1	- 0.44	- 0.21	- 0.04	+ 0.06	
6	+ 0.2	- 0.1	- 0.57	- 0.23	- 0.04	0.00	δ Cephei and δ Urs. Min.
7	- 0.6	- 0.1	- 0.62	- 0.16	- 0.01	+ 0.01	
11	- 1.4	- 0.1	- 0.61	- 0.21	- 0.03	+ 0.07	δ Cephei and δ Urs. Min.
12	- 2.3	- 0.1	- 0.63	- 0.18	+ 0.02	+ 0.09	
15	- 1.5	- 0.1	- 0.54	- 0.14	+ 0.05	+ 0.14	δ Cephei and δ Urs. Min.
16	- 2.7	- 0.1	- 0.54	- 0.17	+ 0.03	+ 0.10	
18	- 1.7	- 0.1	- 0.06	- 0.18	- 0.01	+ 0.02	
19	- 1.7	- 0.1	- 0.06	- 0.21	- 0.04	- 0.02	δ Cephei and δ Urs. Min.
20	- 2.2	- 0.1	- 0.08	- 0.19	- 0.01	+ 0.03	
21	- 2.5	- 0.1	- 0.06	- 0.18	0.00	+ 0.08	
22	- 3.0	- 0.1	+ 0.05	- 0.21	- 0.02	+ 0.12	δ Cephei and ϵ Urs. Min.
23	- 3.6	- 0.1	+ 0.02	- 0.24	- 0.05	+ 0.11	
25	- 2.8	0.0	- 0.02	- 0.36	- 0.12	+ 0.10	
26	- 2.6	0.0	- 0.05	- 0.35	- 0.08	+ 0.09	δ Cancri and δ Urs. Min.
27	- 2.9	0.0	- 0.03	- 0.36	- 0.09	- 0.04	
28	- 2.8	0.0	+ 0.02	- 0.39	- 0.10	- 0.17	δ Cephei and 111 R. P. L.
29	- 2.8	0.0	- 0.06	- 0.43	- 0.15	- 0.14	
30	- 2.4	0.0	- 0.02	- 0.36	- 0.03	- 0.12	
Feb 1	- 2.8	0.0	+ 0.14	- 0.31	- 0.04	- 0.07	δ R. P. L. and δ Urs. Min.
2	- 2.8	0.0	+ 0.08	- 0.31	- 0.05	- 0.05	
3	- 3.0	- 0.1	+ 0.14	- 0.22	0.00	- 0.03	α Orionis and δ Urs. Min.
4	- 2.7	0.0	+ 0.26	- 0.29	- 0.04	- 0.05	
5	- 2.8	0.0	+ 0.21	- 0.33	- 0.10	- 0.06	
8	- 3.4	0.0	+ 0.12	- 0.27	- 0.06	- 0.11	δ Cephei and α Columbae.
9	- 3.3	- 0.1	+ 0.03	- 0.25	- 0.06	- 0.03	δ Cephei and ϵ Urs. Min.
10	- 3.3	- 0.1	+ 0.07	- 0.21	- 0.03	- 0.05	

The Transit clock rate was changed 0.5 second, after the observation on January 16th.

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 3'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars.
1864	"	"	"	"	"	"	
Feb. 11	-2.9	-0.1	0.00	-0.27	-0.06	-0.08	40 R. P. L. and 3 Urs. Min.
12	-2.6	-0.1	-0.03	-0.24	-0.04	-0.06	
13	-2.7	-0.1	+0.00	-0.27	-0.05	-0.04	
15	-2.1	0.0	+0.01	-0.22	-0.01	+0.01	49 R. P. L. and 3 Urs. Min.
16	-2.5	+0.1	-0.03	-0.26	-0.03	-0.06	51 Cephei and 3 Urs. Min.
17	-2.5	+0.1	+0.07	-0.19	-0.01	-0.09	
18	-2.6	+0.1	+0.28	-0.21	-0.03	-0.11	
19	-2.2	+0.1	+0.04	-0.18	-0.07	-0.14	51 Cephei and 3 Urs. Min.
21	.	...	-0.26	-0.10	-0.03	-0.12	
22	-2.7	+0.1	+0.07	-0.06	+0.01	-0.11	
23	-2.4	+0.1	-0.12	-0.21	-0.06	-0.11	
24	-2.1	+0.1	+0.01	-0.17	-0.03	-0.10	
25	-2.7	+0.1	+0.13	-0.15	-0.01	-0.09	
26	-2.2	+0.1	+0.22	-0.13	0.00	-0.08	51 Cephei and 3 Urs. Min.
29	-1.7	0.0	+0.26	-0.13	-0.02	-0.12	
Mar. 1	-1.3	0.0	+0.32	-0.09	-0.01	-0.14	70 and 150 R. P. L.
2	-2.1	0.0	+0.25	-0.18	-0.07	-0.16	
3	-2.3	0.0	+0.22	-0.11	-0.02	-0.19	51 Cephei and 24 Cephei.
4	-2.1	0.0	+0.27	-0.16	-0.06	-0.18	
5	-2.4	0.0	+0.21	-0.21	-0.07	-0.17	51 Cephei and 150 R. P. L.
7	-1.8	0.0	+0.32	-0.10	-0.01	-0.18	
8	-2.0	0.0	+0.32	-0.20	-0.06	-0.19	
9	-1.9	0.0	+0.25	-0.22	-0.07	-0.20	40 and 150 R. P. L.
10	-2.2	0.0	+0.14	-0.23	-0.07	-0.19	
11	-1.8	0.0	+0.07	-0.21	-0.04	-0.18	
14	-2.0	0.0	+0.21	-0.20	-0.04	-0.14	70 and 150 R. P. L.
15	-1.9	0.0	+0.15	-0.17	-0.02	-0.10	
16	-2.1	+0.1	+0.17	-0.09	+0.03	-0.06	60 and 143 R. P. L.
17	-1.5	-0.1	-0.30	-0.14	-0.02	-0.11	
18	-1.8	-0.1	-0.22	-0.12	+0.02	-0.12	

Instrumental Corrections adopted in 1864.

Date	Level	Read in 5	Clock Rate.	Inclina- tion.	Collima- tion	Meridian.	Determining Stars
1864	"	"	"	"	"	"	
Mar 19	- 1.4	+ 0.1	+ 0.29	- 0.10	0.00	- 0.20	60 R. P. L. and 24 Cephei.
21	- 1.9	+ 0.1	+ 0.24	- 0.07	+ 0.01	- 0.17	
22	- 2.0	+ 0.1	+ 0.25	- 0.07	+ 0.03	- 0.16	
23	- 1.5	+ 0.1	+ 0.24	- 0.10	- 0.01	- 0.15	60 and 156 R. P. L.
30	- 1.0	+ 0.1	+ 0.25	- 0.05	0.00	- 0.17	
31	- 0.8	+ 0.1	+ 0.33	- 0.05	+ 0.02	- 0.17	72 and 158 R. P. L.
Apr 1	- 0.6	- 0.3	+ 0.36	- 0.02	- 0.05	- 0.18	
2	- 0.9	- 0.3	+ 0.24	- 0.08	- 0.03	- 0.20	70 R. P. L. and Polaris.
4	- 1.1	- 0.3	- 0.06	- 0.12	- 0.03	- 0.21	
5	- 0.5	- 0.3	- 0.06	- 0.10	- 0.03	- 0.21	
6	- 1.4	- 0.3	- 0.10	- 0.09	- 0.03	- 0.21	89 R. P. L. and Polaris.
7	- 0.3	- 0.3	- 0.30	- 0.09	- 0.03	- 0.21	
8	- 0.8	- 0.3	- 0.17	- 0.07	- 0.02	- 0.22	
9	- 0.5	- 0.3	- 0.21	- 0.07	- 0.02	- 0.22	
11	.....	.....	- 0.02	- 0.07	- 0.02	- 0.23	
12	- 0.4	- 0.3	+ 0.11	- 0.06	- 0.02	- 0.23	60 and 150 R. P. L.
13	- 0.7	- 0.3	- 0.03	- 0.07	- 0.03	- 0.23	
14	- 0.1	- 0.3	+ 0.01	- 0.07	0.00	- 0.22	
15	+ 0.1	- 0.3	- 0.06	- 0.05	+ 0.01	- 0.22	72 and 150 R. P. L.
16	- 0.4	+ 0.1	- 0.13	- 0.07	0.00	- 0.19	72 R. P. L. and Polaris.
18	- 0.5	+ 0.1	+ 0.09	- 0.06	+ 0.02	- 0.21	
19	- 0.9	+ 0.1	+ 0.17	- 0.05	+ 0.03	- 0.22	
20	- 0.4	+ 0.1	+ 0.00	- 0.10	- 0.02	- 0.23	
21	- 0.7	+ 0.1	+ 0.03	- 0.09	0.00	- 0.24	γ Urs Maj. and Polaris.
22	0.0	+ 0.1	+ 0.14	- 0.05	+ 0.02	- 0.24	
23	- 0.4	+ 0.1	+ 0.17	- 0.04	+ 0.02	- 0.25	
25	- 0.2	+ 0.1	+ 0.15	- 0.03	+ 0.01	- 0.26	
26	0.0	+ 0.1	+ 0.11	- 0.05	- 0.01	- 0.26	101 R. P. L. and Polaris.
27	+ 0.2	+ 0.1	+ 0.07	- 0.03	+ 0.01	- 0.24	
28	- 0.1	+ 0.1	- 0.06	- 0.03	0.00	- 0.23	

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars
1864.	"	"	"	"	"	"	
Apl. 29	0.0	+0.1	-0.20	-0.04	0.00	-0.21	
30	+0.4	+0.1	-0.14	+0.02	+0.04	-0.19	γ Ura Maj. and Polaris
May 2	+0.8	+0.1	+0.06	-0.01	+0.05	-0.19	
3	+0.9	+0.1	+0.08	-0.03	0.00	-0.19	
4	+0.4	+0.1	+0.06	-0.01	+0.02	-0.19	
5	+0.6	+0.1	-0.05	+0.02	+0.05	-0.19	101 R. P. L. and Polaris
6	0.0	+0.1	-0.20	+0.03	+0.06	-0.20	
7	+0.5	+0.1	-0.24	+0.03	+0.03	-0.21	γ Ura Maj. and Polaris
10	+0.5	-0.1	-0.08	+0.02	-0.01	-0.23	
12	+0.6	-0.1	-0.13	+0.01	+0.02	-0.24	89 and 12 R. P. L.
13	+0.7	-0.1	-0.05	+0.04	+0.07	-0.23	
14	+0.2	-0.1	0.00	-0.02	-0.02	-0.23	
16	+0.8	-0.1	-0.57	0.00	-0.01	-0.22	
17	+1.0	-0.1	-0.51	+0.04	+0.02	-0.21	99 and 158 R. P. L.
18	+0.3	-0.1	-0.16	0.00	+0.01	-0.24	
19	+0.6	-0.1	-0.09	-0.01	0.00	-0.27	
20	+1.2	-0.1	-0.08	-0.02	-0.01	-0.31	
21	-0.5	-0.1	-0.10	+0.02	+0.02	-0.34	111 and 14 R. P. L.
23	+1.3	0.0	-0.38	-0.03	-0.01	-0.28	γ Ura Maj. and Polaris
24	+1.7	0.0	-0.73	-0.01	0.00	-0.26	
25	+1.3	0.0	-0.73	+0.01	-0.02	-0.24	
26	+1.6	0.0	-0.46	0.00	0.00	-0.21	
28	+1.2	0.0	-0.27	-0.03	-0.01	-0.17	δ Ura Maj. and Polaris
30	+0.8	0.0	-0.02	0.00	+0.03	-0.20	
31	+0.9	0.0	-0.01	-0.02	-0.02	-0.21	
June 2	+1.3	0.0	-0.19	-0.04	0.00	-0.23	
3	+2.0	0.0	-0.20	0.00	-0.02	-0.23	
4	+1.7	0.0	-0.19	0.00	-0.02	-0.21	3 Ura Maj. and 33 R. P. L.
7	+1.4	0.0	-0.05	+0.02	0.00	-0.23	

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars.
1864.	"	"	"	"	"	"	
June 8	+ 1.6	0.0	- 0.08	+ 0.01	0.00	- 0.22	γ Bootis and Polaris.
10	+ 1.3	- 0.1	- 0.09	- 0.01	- 0.04	- 0.20	
14	+ 1.0	- 0.1	- 0.19	+ 0.04	- 0.01	- 0.16	
15	+ 0.5	+ 0.1	- 0.18	0.00	- 0.01	- 0.20	
16	+ 1.1	+ 0.1	- 0.10	+ 0.01	- 0.02	- 0.28	
17	+ 1.0	+ 0.1	- 0.08	+ 0.02	- 0.01	- 0.23	
19	+ 0.9	+ 0.1	- 0.15	+ 0.07	+ 0.02	- 0.23	
21	+ 0.9	+ 0.1	- 0.25	+ 0.05	- 0.02	- 0.22	
24	+ 0.4	- 0.2	- 0.22	+ 0.06	- 0.01	- 0.21	
27	0.0	- 0.2	+ 0.03	+ 0.07	- 0.01	- 0.20	
28	- 0.4	- 0.2	- 0.06	+ 0.06	- 0.05	- 0.19	111 R. P. L. and Antares.
29	+ 0.7	- 0.2	- 0.19	+ 0.06	- 0.03	- 0.19	
30	+ 0.2	- 0.2	- 0.08	+ 0.07	- 0.04	- 0.19	
July 1	+ 0.3	- 0.2	- 0.02	+ 0.04	- 0.07	- 0.20	
2	+ 0.5	- 0.2	- 0.05	+ 0.04	- 0.06	- 0.20	ε Urs. Min. and 51 Cephei.
4	+ 0.7	- 0.2	- 0.10	+ 0.04	- 0.04	- 0.21	
7	- 0.1	+ 0.1	0.00	+ 0.07	+ 0.02	- 0.23	
8	+ 0.6	- 0.2	+ 0.04	+ 0.07	- 0.02	- 0.23	
9	- 0.2	- 0.2	0.00	+ 0.03	- 0.04	- 0.24	
11	+ 0.2	- 0.2	- 0.12	+ 0.04	- 0.02	- 0.25	
19	- 0.6	0.0	- 0.11	- 0.02	- 0.01	- 0.28	
21	- 0.2	0.0	+ 0.02	+ 0.04	0.00	- 0.27	
22	- 0.6	0.0	+ 0.03	+ 0.07	+ 0.01	- 0.26	
23	- 0.5	0.0	+ 0.02	+ 0.10	+ 0.03	- 0.26	
25	- 0.3	0.0	+ 0.01	+ 0.08	+ 0.04	- 0.25	δ Urs. Min. and θ Ophiuchi.
26	- 1.6	0.0	+ 0.01	+ 0.15	+ 0.05	- 0.25	
Aug. 5	+ 0.9	- 0.2	- 0.13	- 0.02	- 0.03	- 0.21	
8	+ 0.6	- 0.2	+ 0.03	+ 0.01	- 0.01	- 0.24	
9	+ 0.5	- 0.2	+ 0.04	+ 0.01	- 0.01	- 0.24	δ Urs. Min. and α Sagittarii.
11	+ 0.5	- 0.2	+ 0.03	0.00	- 0.03	- 0.24	ε Urs. Min. and 43 R. P. L.

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars
1864.	"	"	s	s	s	s	
Aug. 12	+ 0.8	- 0.2	+ 0.08	- 0.02	+ 0.01	- 0.23	
13	+ 0.2	- 0.2	+ 0.06	- 0.01	+ 0.02	- 0.22	
15	+ 0.1	- 0.2	- 0.07	- 0.01	- 0.01	- 0.21	
16	+ 0.6	+ 0.2	0.00	+ 0.01	- 0.02	- 0.20	8 Urs. Min. and 51 Cephei.
17	- 0.3	- 0.2	+ 0.10	+ 0.02	+ 0.03	- 0.21	
18	+ 0.2	+ 0.2	+ 0.07	- 0.06	- 0.02	- 0.23	
19	+ 0.9	+ 0.2	0.00	- 0.02	- 0.02	- 0.24	
20	+ 0.5	+ 0.2	- 0.01	- 0.02	- 0.01	- 0.25	
22	+ 0.5	+ 0.2	+ 0.13	- 0.06	- 0.06	- 0.28	
23	+ 0.5	+ 0.2	0.00	- 0.08	- 0.07	- 0.29	λ Urs. Min. and 51 Cephei.
24	+ 0.7	+ 0.2	- 0.07	- 0.04	- 0.01	- 0.27	
26	+ 0.5	+ 0.2	0.00	- 0.04	- 0.01	- 0.24	
29	+ 0.4	+ 0.2	- 0.12	- 0.12	- 0.04	- 0.20	
31	+ 1.5	+ 0.2	- 0.07	- 0.16	- 0.04	- 0.17	
Sep. 2	+ 2.7	- 0.3	0.00	- 0.11	- 0.01	- 0.14	24 Urs. Min. and 3 Aquila.
5	+ 3.3	- 0.3	0.00	- 0.12	0.00	- 0.13	150 R. P. L. and ρ Capri- corni.
9	+ 2.6	- 0.3	+ 0.02	- 0.13	0.00	- 0.20	
10	+ 2.9	- 0.3	+ 0.03	- 0.13	- 0.01	- 0.22	
12	+ 3.1	- 0.3	- 0.05	- 0.14	0.00	- 0.26	
13	+ 2.4	- 0.3	- 0.08	- 0.16	- 0.01	- 0.28	143 and 40 R. P. L.
14	+ 2.6	- 0.3	- 0.06	- 0.17	- 0.01	- 0.27	
15	+ 1.8	- 0.3	- 0.10	- 0.15	+ 0.02	- 0.27	
16	+ 2.5	- 0.1	- 0.12	- 0.15	+ 0.02	- 0.26	
19	+ 2.7	- 0.1	- 0.05	- 0.10	+ 0.02	- 0.24	
20	+ 2.6	- 0.1	- 0.04	- 0.10	+ 0.03	- 0.24	
23	+ 2.6	- 0.1	- 0.06	- 0.13	+ 0.02	- 0.22	
24	+ 2.3	- 0.1	- 0.07	- 0.13	+ 0.02	- 0.21	
26	+ 2.3	- 0.1	- 0.08	- 0.15	+ 0.01	- 0.20	150 and 60 R. P. L.
27	+ 3.3	- 0.1	- 0.07	- 0.14	+ 0.01	- 0.24	
28	+ 1.6	- 0.1	- 0.04	- 0.13	- 0.02	- 0.28	
29	+ 1.6	- 0.1	- 0.04	- 0.16	- 0.01	- 0.31	λ Urs. Min. and 60 R. P. L.

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars
1864.	"	"	"	"	"	"	
Oct. 1	+1.3	-0.3	-0.15	-0.11	+0.01	-0.26	
3	+2.1	-0.3	-0.32	-0.16	-0.04	-0.19	158 and 72 R. P. L.
4	+2.1	-0.3	-0.27	-0.15	+0.01	-0.19	
5	+1.5	-0.3	-0.29	-0.19	-0.04	-0.18	
6	+0.6	-0.3	-0.24	-0.14	+0.01	-0.18	
7	+0.7	-0.3	-0.18	-0.17	-0.04	-0.17	
8	+0.8	-0.3	-0.60	-0.14	-0.01	-0.17	160 R. P. L. and 3 Sculptoria.
10	.....	.....	-0.18	-0.15	-0.01	-0.17	
11	+0.8	-0.3	-0.26	-0.16	-0.02	-0.17	
13	+1.3	-0.3	-0.24	-0.20	-0.02	-0.17	Polaris and 6 Aquarii.
14	+1.0	-0.3	-0.16	-0.21	-0.01	-0.18	
15	+1.3	-0.3	-0.14	-0.26	-0.06	-0.18	
17	+2.1	+0.2	-0.31	-0.22	+0.02	-0.19	
20	+5.4	+0.2	-0.36	-0.45	-0.02	-0.21	
21	+6.1	+0.2	-0.23	-0.44	-0.06	-0.22	3 Pegasi and 79 R. P. L.
22	+6.2	+0.2	-0.16	-0.44	-0.05	-0.20	
24	+7.3	+0.2	-0.07	-0.26	-0.01	-0.15	
25	+6.3	+0.2	-0.16	-0.39	0.00	-0.13	
26	+6.6	+0.2	-0.24	-0.35	+0.02	-0.10	
27	+6.0	+0.2	-0.21	-0.35	+0.01	-0.08	Polaris and 101 R. P. L.
28	+5.0	+0.2	-0.21	-0.31	+0.02	-0.08	
31	+4.7	+0.2	+0.84	-0.34	+0.01	-0.09	
Nov. 1	...	...	+1.06	-0.34	-0.02	-0.09	
2	+5.1	-0.2	+1.23	-0.33	-0.05	-0.10	12 and 72 R. P. L.
3	+4.3	-0.2	+1.23	-0.32	-0.03	-0.09	
4	+4.8	-0.2	-0.01	-0.30	-0.05	-0.09	
5	+3.8	-0.2	+0.01	-0.32	-0.03	-0.08	158 and 80 R. P. L.
7	+2.8	-0.2	-0.08	-0.36	-0.03	-0.05	
9	+3.7	-0.2	-0.03	-0.34	-0.02	-0.03	
10	+4.0	-0.2	-0.03	-0.34	0.00	0.00	

The Transit clock was cleaned on October 29th, without removing or in any way interfering with the pendulum. Its rate was altered 1 second, after the observations on November 3.

Instrumental Corrections adopted in 1864.

Date.	Index.	Run in 5'	Clock Rate.	Inclina- tion.	Collima- tion.	Meridian.	Determining Stars.
1864.	"	"	s	s	s	s	
Nov. 11	+ 3.4	- 0.2	- 0.07	- 0.32	- 0.01	+ 0.02	
12	+ 3.3	- 0.2	- 0.21	- 0.34	- 0.01	+ 0.01	
14	+ 3.1	- 0.2	- 0.57	- 0.33	- 0.01	+ 0.07	
16	+ 4.6	+ 0.1	- 0.75	- 0.32	+ 0.02	+ 0.10	
21	+ 6.3	+ 0.1	- 0.89	- 0.35	+ 0.02	+ 0.12	34 R. P. L. and γ^1 Eridani.
22	+ 6.7	+ 0.1	- 0.92	- 0.30	+ 0.05	+ 0.03	Polaris, 34 and 111 R. P. L.
23	+ 6.6	+ 0.1	- 0.98	- 0.32	+ 0.04	+ 0.04	
24	+ 5.6	+ 0.1	- 1.06	- 0.32	0.00	+ 0.05	
25	+ 5.5	+ 0.1	- 1.06	- 0.37	0.00	+ 0.07	
29	+ 7.1	+ 0.1	+ 0.01	- 0.28	+ 0.04	+ 0.12	Polaris and Achernar.
30	+ 7.8	+ 0.1	+ 0.03	- 0.27	+ 0.04	+ 0.09	
Dec. 1	+ 7.9	- 0.3	- 0.01	- 0.29	+ 0.02	+ 0.06	Polaris and ν Piscium.
2	+ 7.6	- 0.3	- 0.09	- 0.24	+ 0.07	+ 0.08	
3	+ 7.6	- 0.3	- 0.05	- 0.32	0.00	+ 0.10	
5	+ 6.7	- 0.3	- 0.18	- 0.30	+ 0.01	+ 0.15	
6	+ 7.4	- 0.3	- 0.18	- 0.33	+ 0.01	+ 0.17	33 R. P. L. and β Ceti.
7	+ 7.6	- 0.3	- 0.17	- 0.33	- 0.01	+ 0.15	
8	+ 7.7	- 0.3	- 0.20	- 0.32	0.00	+ 0.12	
9	+ 7.5	- 0.3	- 0.17	- 0.29	0.00	+ 0.10	
10	+ 6.1	- 0.3	- 0.16	- 0.32	0.00	+ 0.07	Polaris and ζ^1 Ceti
12	+ 6.3	- 0.3	- 0.15	- 0.30	- 0.05	+ 0.06	
13	+ 6.2	- 0.3	- 0.22	- 0.36	- 0.04	+ 0.05	
14	+ 5.0	- 0.3	- 0.27	- 0.35	- 0.03	+ 0.05	
15	+ 5.3	+ 0.1	- 0.26	- 0.34	- 0.01	+ 0.04	51 Cephei and δ Urs. Min.
16	+ 5.3	+ 0.1	- 0.24	- 0.34	0.00	+ 0.06	
17	+ 5.7	+ 0.1	- 0.18	- 0.37	0.00	+ 0.06	
20	+ 5.0	+ 0.1	- 0.16	- 0.27	+ 0.04	+ 0.14	Polaris, 34 and 114 R. P. L.
21	+ 4.9	+ 0.1	- 0.19	- 0.35	+ 0.03	+ 0.13	
22	+ 4.9	+ 0.1	- 0.19	- 0.30	+ 0.04	+ 0.13	
23	+ 5.0	+ 0.1	- 0.13	- 0.32	+ 0.02	+ 0.12	

The Transit clock-rate was again altered 1 second on November 26th.

SEPARATE RESULTS OF OBSERVATIONS.

These, though forming the bulk of the present volume, require but little further explanation than is afforded by the headings of each column.

In the second column, Flamsteed's numbers, Bayer's Greek letters, and familiar names by which the principal stars are known, have been used in preference to any other designations. For other objects, reference is made to "*Taylor's Madras Catalogue*"; to Baily's edition of "*Lalande*"; to the two Catalogues of "*Bessel's Zones*", compiled by Weisse; with W. B. E. for the first, containing stars within 15° of the equator, and W. B. N. for the second or northern one. Similarly, the northern and southern catalogues of "*Argelander's Zones*", compiled by Oeltzen, are indicated respectively by O. A. N. and O. A. S. Polar stars, used for meridian error, taken from the "*Catalogue of 164 Stars within 6° of the North Pole*", in Vol. XVI of the "*Radeliffé Observations*", are referred to by their number therein, followed by R. P. L. For the Variable Stars I have used my own nomenclature, agreed to by Prof. Argelander, Sir John Herschel and other astronomers, when my Atlas of these objects was first fairly taken in hand, nearly thirty years back; in which Prof. Argelander's letters, R, S, T, &c., are retained, but the name of the constellation is followed by Var. 1, Var. 2, &c., showing thereby the order of proved variability of each star in such constellation. As it is now so many years since this simple method of reference to the variable stars was first suggested by me, it may be as well to state that it makes no distinction between periodical and temporary stars; those which are subject to more or less regular changes and those which have only once risen to a maximum. Thus, in Cassiopea, we have Gemma's Nova of 1572, known as B Cassiopea Var. 1; a Cassiopea Var. 2; R Cassiopea Var. 3; &c. In Scorpio also, we have, R Scorpium Var. 1; S Scorpium Var. 2; the two small variables near the cluster 80 Messier, first figured on page 357 of Smyth's Celestial Cycle; T Scorpium Var. 3, Auver's Nova of 1860, which blazed out apparently in the centre of the cluster itself, and V Scorpium Var. 4, my own Nova of 1863, No. 601 of the Lists for 1863 on pages 99 and 152 of this volume.

The estimations of magnitude made by Ragoonatha Chary are fairly accordant with Argelander's scale and are generally within a quarter of a magnitude, but those of Moottoosawmy, who affected tenths, were much less certain.

MEAN POSITIONS OF STARS OBSERVED IN EACH YEAR.

In the annual lists of Mean Positions of Stars, only complete observations are included, so as to render the mean date the same for both co-ordinates. The numbers and references for the stars observed are the same as in the Separate Results. When magnitudes were noted, the mean of the estimations is given, but when no figure stands in the column of Estimations it must be understood that the magnitude entered is taken, from Argelander's "*Uranometria Nova*", from the two Radcliffe Catalogues, or from some other trustworthy source.

The Right Ascensions and Polar Distances are the simple means of the separate results, the latter being still only provisional and subject to further small changes in regard to the corrections for flexure and assumed latitude.

The tables on the four following pages, showing the excess of the Madras Mean Positions above those given in the Nautical Almanac for each year, render it certain that the Polar Distances will require some further small correction before being formed into a final general catalogue.

The annual precessions were computed by means of the formulæ given in the Nautical Almanac, in which the co-efficients of Prof. Peters were adopted, and the secular variations are the differentials of the precessions multiplied by 100, the variations of m and n being duly taken into account.

The proper motions, when not otherwise mentioned, are from the well-known lists published by Mr. Main, in the 19th and 28th, and by Mr. Stone, in the 33rd volumes of the "*Memoirs of the Royal Astronomical Society.*" When from any other source the authority is given in the foot notes: "*Greenwich Catalogue*" refers to the most recent of the five Greenwich Catalogues in which the star was found; and "*Stone's Catalogue*" to the great "*Cape Catalogue of 12,441 Stars.*"

OTHER OBSERVATIONS WITH THE MERIDIAN CIRCLE.

The observations given in this volume relate only to the fixed stars. During the three years however, 163 observations of the Moon, 66 of Mars and 195 of 37 Minor Planets were made with the Meridian Circle, all of which await publication in a volume of Planetary and Cometary discoveries and observations, made chiefly with the equatorials but supplemented by the Meridian Circle when any planet was not much below the 10th magnitude and was therefore observable in the illuminated field of that instrument.

Comparison of Madras Mean Positions with the Nautical Almanac.

Star.	Approximate Position 1863.		1862.			1863.			1864.		
			Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	h. m.	s.					s.	"			
α Andromedæ ...	0 1	61 40	4	+ 0.03	+ 0.0	4	+ 0.01	+ 1.8	9	- 0.04	+ 2.2
γ Pegasi (Algenib) ...	0 6	75 35	2	+ 0.02	+ 0.2	6	- 0.01	+ 1.7	9	+ 0.02	+ 1.7
12 Ceti ...	0 23	94 43	5	- 0.03	+ 0.7	6	- 0.04	+ 1.1	9	- 0.06	+ 1.6
α Cassiopeiæ ...	0 33	34 13	...	.....	.....	2	- 0.13	+ 1.7	1	- 0.30	+ 2.2
β Ceti ...	0 37	108 44	6	+ 0.02	- 0.0	2	+ 0.12	- 0.7	11	+ 0.07	- 0.4
ϵ Piscium ...	0 56	82 51	4	- 0.03	- 0.2	11	- 0.06	+ 0.7	8	- 0.04	+ 1.0
α Urs. Min. (Polaris) ...	1 9	1 25	...	.....	.....	9	+ 0.12	+ 0.3	8	- 0.45	+ 0.6
θ^1 Ceti ...	1 17	98 53	4	- 0.01	- 0.3	12	+ 0.03	+ 0.4	6	+ 0.02	+ 1.1
η Piscium ...	1 24	75 22	7	+ 0.04	+ 0.2	10	+ 0.01	+ 1.7	10	+ 0.04	+ 1.0
α Eridani (Achernar) ...	1 33	147 56	...	.....	.....	2	+ 0.33	+ 2.2	3	+ 0.30	+ 3.6
ν Piscium ...	1 34	85 12	22	+ 0.03	+ 0.6	5	+ 0.03	+ 0.6	6	- 0.03	+ 1.1
β Arietis ...	1 47	69 52	15	0.00	+ 1.2	13	+ 0.01	+ 1.6	7	+ 0.01	+ 2.2
α Arietis ...	1 59	67 11	11	+ 0.04	+ 0.6	10	- 0.05	+ 1.5	7	- 0.06	+ 1.7
θ^2 Ceti ...	2 10	97 3	6	- 0.02	+ 0.4	6	+ 0.03	+ 1.2	7	+ 0.05	+ 0.7
ξ^1 Ceti ...	2 21	97 51	6	+ 0.03	- 0.1	8	- 0.02	- 0.6	9	- 0.02	- 0.1
γ Ceti ...	2 36	87 21	4	0.00	- 0.8	6	+ 0.01	+ 0.0	8	+ 0.05	+ 0.2
α Ceti ...	2 55	86 27	2	- 0.02	- 0.0	8	+ 0.02	- 0.1	7	+ 0.04	+ 0.4
δ Arietis ...	3 4	70 43	2	+ 0.05	+ 1.8	5	- 0.01	+ 1.8	9	- 0.05	+ 2.1
α Persei ...	3 16	40 38	1	0.00	+ 1.1	.....	.....	.....	3	- 0.13	+ 0.3
η Tauri ...	3 39	66 19	3	- 0.03	+ 1.0	10	- 0.02	+ 1.2	11	0.00	+ 1.7
γ^1 Eridani ...	3 52	103 54	2	+ 0.04	- 1.3	8	+ 0.02	0.0	8	+ 0.09	+ 0.6
θ^1 Eridani ...	4 5	97 12	...	.....	.....	2	- 0.03	+ 1.7	3	- 0.02	+ 1.2
ϵ Tauri ...	4 21	71 8	4	+ 0.06	+ 1.0	11	0.00	+ 0.9	13	+ 0.02	+ 1.9
α Tauri (Aldebaran) ...	4 28	73 46	1	- 0.01	+ 1.5	11	0.00	+ 1.6	9	- 0.01	+ 1.9
ϵ Aurigæ ...	4 49	57 3	2	+ 0.01	+ 2.0	3	- 0.10	+ 0.6	8	0.00	+ 1.5
ϵ Leporis ...	5 0	112 33	...	.....	.....	6	+ 0.07	- 0.4	5	+ 0.02	+ 0.1
α Aurigæ (Capella) ...	5 7	44 9	...	.....	.....	1	- 0.03	- 0.7	2	- 0.07	- 0.2
β Orionis (Rigel) ...	5 8	98 22	...	.....	.....	4	- 0.03	+ 0.7	7	0.00	+ 0.4
β Tauri ...	5 18	61 31	2	+ 0.01	+ 1.6	7	- 0.03	+ 0.3	3	+ 0.03	+ 1.3
δ Orionis ...	5 25	90 24	...	.....	.....	7	- 0.02	+ 0.4	3	+ 0.01	- 0.8
α Leporis ...	5 26	107 55	...	.....	.....	5	+ 0.03	- 0.3	2	+ 0.04	+ 0.8
ϵ Orionis ...	5 29	91 18	...	.....	.....	3	+ 0.03	+ 0.3	5	+ 0.08	+ 0.6
α Columbe ...	5 35	124 9	...	.....	.....	5	- 0.11	+ 1.3	6	- 0.14	+ 2.0
α Orionis ...	5 48	52 37	...	.....	.....	12	0.00	- 0.2	4	+ 0.06	0.0
ν Orionis ...	6 0	75 13	...	.....	.....	12	- 0.02	+ 0.6	6	+ 0.04	+ 1.1

Comparison of Madras Mean Positions with the Nautical Almanac.

Star.	Approximate Position 1863		1862.			1863			1864.		
			Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	<i>h. m.</i>	<i>s.</i>					<i>s.</i>	<i>"</i>			
μ Geminorum ...	6 15	67 25	1	- 0'08	- 0'1	7	+ 0'06	+ 0'5	8	+ 0'03	+ 1'0
α Argûs (Canopus) ...	6 21	142 37	..	..	..	..	..	..	3	- 0'11	- 0'8
γ Geminorum ...	6 29	73 29	2	- 0'01	+ 1'4	12	- 0'03	+ 0'9	9	- 0'05	+ 1'7
δ (Her.) Cephei ...	6 35	2 45	..	..	..	8	+ 0'03	+ 0'6	15	+ 0'27	+ 0'5
α Can. Maj. (Sirius) ...	6 39	106 32	..	..	..	1	- 0'21	- 0'3	3	- 0'20	- 0'1
ϵ Canis Majoris ...	6 53	118 47	..	..	..	6	+ 0'01	- 1'1	7	+ 0'01	- 0'9
γ Canis Majoris ...	6 58	105 26	..	..	..	7	- 0'02	+ 0'5	4	- 0'05	+ 0'5
δ Geminorum ...	7 12	67 46	..	..	..	17	- 0'03	+ 0'9	10	+ 0'01	+ 1'7
α^2 Gem. (Castor) ...	7 26	57 49	..	..	..	12	0'00	+ 0'8	3	- 0'03	+ 1'4
α Can. Min. (Procyon) ...	7 32	94 26	..	..	..	15	+ 0'04	+ 1'9	7	+ 0'04	+ 2'1
β Gem. (Pollux) ...	7 37	61 39	..	..	..	10	+ 0'04	+ 0'9	6	+ 0'05	+ 1'5
θ Cancri ...	7 55	61 49	..	..	..	9	- 0'04	+ 1'5	4	- 0'03	+ 2'1
λ Argûs ...	8 2	113 55	..	..	..	6	+ 0'07	+ 0'3	9	0'00	+ 0'2
η Cancri ...	8 25	69 6	..	..	..	8	+ 0'05	+ 0'2	9	+ 0'04	+ 1'4
ϵ Hydræ ...	8 40	83 5	..	..	..	12	- 0'06	+ 1'4	6	- 0'04	+ 0'6
ι Ursæ Majoris ...	8 50	41 25	..	..	..	..	..	..	4	+ 0'06	+ 0'2
κ Cancri ...	9 11	71 43	..	..	..	13	+ 0'14	+ 0'6	6	+ 0'02	+ 0'8
ι Argûs ...	9 13	148 42	..	..	..	..	..	..	3	+ 0'12	+ 4'8
α Hydræ ...	9 21	98 4	..	..	..	13	0'00	+ 0'3	6	+ 0'01	+ 0'3
θ Ursæ Majoris ...	9 24	37 42	..	..	..	..	..	..	2	+ 0'06	+ 0'6
ϵ Leonis ...	9 38	65 26	..	..	..	12	+ 0'01	+ 0'7	9	- 0'02	+ 1'4
ν Leonis ...	9 53	81 18	..	..	..	13	+ 0'01	+ 0'1	10	0'00	+ 0'1
α Leonis (Regulus) ...	10 1	77 22	..	..	..	20	- 0'02	+ 0'4	14	- 0'01	+ 0'3
γ^1 Leonis ...	10 12	60 28	..	..	..	20	+ 0'05	+ 0'7	12	- 0'04	+ 1'1
ρ Leonis ...	10 26	79 59	..	..	..	12	- 0'06	+ 0'3	10	- 0'03	+ 0'5
η Argûs ...	10 40	148 58	..	..	..	..	..	..	3	- 0'05	+ 3'1
ι Leonis ...	10 42	78 44	..	..	..	11	+ 0'02	+ 0'5	11	+ 0'02	+ 0'8
α Ursæ Majoris ...	10 55	27 31	..	..	..	..	..	..	3	- 0'01	+ 0'4
χ Leonis ...	10 58	81 55	..	..	..	8	- 0'01	- 0'7	11	+ 0'03	- 0'1
δ Leonis ...	11 7	68 44	..	..	..	11	- 0'06	+ 0'2	10	- 0'02	+ 0'7
δ Crateris ...	11 12	104 2	..	..	..	13	+ 0'05	- 1'0	8	+ 0'01	- 0'8
ϵ Leonis ...	11 30	90 4	..	..	..	13	- 0'01	+ 1'0	13	- 0'01	+ 1'3
β Leonis ...	11 43	74 40	..	..	..	6	+ 0'04	+ 1'0	11	+ 0'02	+ 0'9
γ Ursæ Majoris ...	11 47	25 23	..	..	..	..	..	..	1	- 0'11	- 0'1
ϵ Corvi ...	12 3	111 51	3	- 0'08	+ 1'0	5	- 0'02	+ 0'7	8	+ 0'03	+ 0'1

Comparison of Madras Mean Positions with the Nautical Almanac.

Star.	Approximate Position 1863.		1862.			1863.			1864.		
			Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	A. M.	" "					" "				
η Virginis	12 13	89 54	...	.....	.....	4	+ 0.03	+ 1.3	6	+ 0.05	+ 0.9
α Crucis	12 10	152 20	...	.....	.....	...	.....	.....	2	+ 0.20	+ 3.8
β Corvi	12 27	112 38	3	+ 0.10	+ 0.5	5	+ 0.10	- 0.2	4	+ 0.14	- 1.0
γ Virginis	12 35	90 42	...	.....	.....	1	- 0.06	- 3.7	...	.....	.....
12 Canum Venat. ...	12 50	50 56	...	.....	.....	5	- 0.01	+ 1.2	11	+ 0.03	+ 0.9
θ Virginis	13 3	94 48	...	.....	.....	5	- 0.02	+ 0.8	11	- 0.02	+ 0.6
α Virginis (Spica) ...	13 18	100 27	2	+ 0.09	+ 1.8	9	- 0.01	- 0.4	14	+ 0.01	0.0
δ Virginis	13 28	89 54	2	- 0.01	+ 2.5	12	- 0.05	+ 1.2	15	+ 0.05	+ 1.6
η Ursæ Majoris ...	13 42	40 0	1	+ 0.08	+ 1.5	...	.....	.....	3	- 0.07	+ 0.3
η Bootis	13 45	70 55	2	- 0.06	- 0.2	9	- 0.04	+ 0.5	13	- 0.01	+ 0.9
τ Virginis	13 55	87 47	1	+ 0.04	+ 0.1	5	0.00	- 0.7	13	+ 0.02	- 0.3
α Bootis (Arcturus) .	14 9	70 6	4	+ 0.01	+ 0.6	5	+ 0.02	+ 1.3	6	+ 0.05	+ 0.9
ρ Bootis	14 26	59 2	5	- 0.07	+ 1.6	6	- 0.07	+ 1.4	8	- 0.07	+ 1.1
α Centauri (2nd) ...	14 30	150 16	...	.....	.....	...	.....	.....	2	- 1.05	+ 15.1
ϵ Bootis	14 39	62 31	3	+ 0.05	+ 0.3	5	- 0.04	+ 0.3	11	+ 0.05	+ 0.4
α^s Libræ	14 43	105 28	2	- 0.13	+ 0.1	4	- 0.05	- 0.2	12	+ 0.02	- 0.2
β Ursæ Minoris ...	14 51	15 17	2	- 0.23	+ 0.3	...	.....	.....	1	- 0.26	- 1.1
ϕ Bootis	14 59	62 31	3	+ 0.01	+ 2.2	5	- 0.06	+ 0.7	8	- 0.07	+ 1.6
β Libræ	15 10	98 53	3	- 0.13	+ 0.5	6	+ 0.07	0.0	7	- 0.01	- 0.1
α Coronæ Borealis ...	15 20	62 49	6	+ 0.09	+ 0.7	3	0.00	+ 0.3	5	+ 0.05	+ 1.3
α Serpentis	15 38	83 8	2	- 0.02	+ 0.6	6	+ 0.04	- 0.3	7	+ 0.02	+ 0.1
3 Ursæ Minoris ...	15 40	11 47	1	+ 0.21	+ 0.3	...	.....	.....	2	+ 0.20	+ 0.4
β^s Scorpii	15 57	100 26	13	+ 0.01	+ 0.7	6	+ 0.06	- 0.1	7	0.00	- 0.3
3 Ophiuchi	16 7	93 20	1	0.00	+ 2.7	1	+ 0.27	+ 1.0	5	+ 0.05	+ 1.0
α Scorpii (Antares) ..	16 21	116 7	8	0.00	+ 0.3	7	+ 0.03	- 0.9	10	- 0.02	- 0.3
3 Herculis	16 36	58 9	9	0.00	+ 1.9	5	- 0.02	+ 1.8	7	+ 0.01	+ 1.9
α Ophiuchi	16 51	80 25	9	- 0.03	- 0.1	8	+ 0.10	+ 0.4	7	- 0.11	+ 0.5
ϵ Ursæ Minoris ...	17 0	7 45	2	+ 0.04	+ 1.9	...	.....	.....	6	- 0.25	+ 1.6
α Herculis Var. 1 ...	17 8	75 27	5	+ 0.03	0.0	9	+ 0.06	+ 1.2	8	+ 0.02	+ 1.0
θ Ophiuchi	17 14	114 52	4	- 0.08	+ 1.7	9	+ 0.03	+ 1.3	5	+ 0.03	+ 1.0
α Ophiuchi	17 29	77 20	8	+ 0.03	+ 0.8	5	+ 0.02	+ 1.4	5	- 0.02	+ 0.5
μ Herculis	17 41	62 12	3	- 0.02	+ 0.5	...	.....	.....	2	+ 0.03	+ 0.6
γ Draconis	17 53	38 30	1	+ 0.21	+ 1.2	...	.....	.....	1	- 0.01	+ 0.8
μ^s Sagittarii	18 6	111 5	1	+ 0.04	- 1.5	9	+ 0.03	0.0	4	+ 0.03	- 0.1
3 Ursæ Minoris ...	18 17	3 24	...	.....	.....	9	+ 0.10	- 0.9	5	+ 0.41	- 0.5

Comparison of Madras Mean Positions with the Nautical Almanac.

Star.	Approximate Position 1863.		1862.			1863.			1864.		
			Obs.	R. A.	P. D.	Obs.	R. A.	P. D.	Obs.	R. A.	P. D.
	<i>h. m.</i>	<i>s.</i>					<i>s.</i>	<i>"</i>			
α Lyrae (Vega)	18 32	51 21	2	- 0.18	0 0	6	0 00	+ 1.1	4	0 00	+ 1.8
β Lyrae Var 1	18 45	56 48	5	+ 0.07	+ 0.2	4	+ 0.02	+ 0.4	3	- 0.03	+ 0.2
γ Aquilae	18 59	76 20	5	+ 0.10	+ 0.7	7	+ 0.04	+ 1.1	7	+ 0.05	+ 1.8
ω Aquilae	19 11	78 39	2	- 0.13	+ 0.1	5	+ 0.01	+ 0.3	4	- 0.03	0 0
δ Aquilae	19 19	87 9	3	0.00	- 0.2	4	- 0.02	+ 0.4	7	- 0.01	+ 1.3
λ^s Sagittarii	19 28	115 11	3	+ 0.07	+ 1.2	2	+ 0.05	+ 1.9	5	+ 0.11	+ 1.5
γ Aquilae	19 40	79 43	2	- 0.00	+ 1.1	5	- 0.05	+ 0.2	3	- 0.05	+ 0.8
α Aquilae (Altair)	19 44	81 29	2	+ 0.02	- 0.3	2	+ 0.01	+ 0.8	2	+ 0.01	0 0
β Aquilae	19 49	83 55	2	+ 0.04	- 0.2	5	- 0.04	+ 0.7	4	- 0.03	+ 1.0
λ Ursae Minoris	20 1	1 6	...	.....	.....	3	- 0.72	- 0.4	4	- 0.38	0 0
α^s Capricorni	20 10	102 58	3	+ 0.03	+ 0.1	7	+ 0.01	+ 0.2	7	- 0.03	+ 0.1
α Pavonis	20 15	147 10	...	.....	.....	1	- 0.47	+ 3.0	3	- 0.41	+ 1.8
ρ Capricorni	20 21	108 16	4	+ 0.06	+ 0.9	12	+ 0.09	+ 0.7	7	+ 0.06	+ 0.3
α Cygni	20 37	45 12	5	- 0.01	+ 1.1	1	- 0.02	+ 1.5	5	- 0.03	+ 1.3
β Vulpeculae	20 49	62 28	2	+ 0.02	+ 1.3	2	- 0.07	- 0.1	9	- 0.01	+ 1.0
δ Cygni (lat)	21 1	51 55	...	.....	.....	1	+ 0.21	+ 1.8	3	+ 0.26	+ 0.7
γ Cygni	21 7	60 20	5	- 0.03	+ 0.5	6	- 0.01	+ 0.9	9	+ 0.03	+ 1.2
α Cephei	21 15	28 0	...	.....	.....	...	.....	.....	3	+ 0.04	+ 0.6
β Aquarii	21 24	96 10	4	+ 0.03	+ 1.4	11	+ 0.04	+ 0.9	14	+ 0.05	+ 1.2
β Cephei	21 27	20 2	...	.....	.....	...	.....	.....	3	+ 0.20	- 0.9
ϵ Pegasi	21 37	80 45	5	- 0.03	- 0.3	6	- 0.03	+ 0.7	10	- 0.02	+ 0.9
δ Pegasi	21 47	64 43	6	+ 0.06	- 0.3	8	- 0.06	+ 1.6	9	- 0.02	+ 1.7
α Aquarii	21 59	90 59	7	- 0.04	+ 0.1	5	0 00	+ 0.8	10	+ 0.01	+ 0.7
α Gruis	22 0	137 37	...	.....	.....	...	.....	.....	1	- 0.06	+ 2.4
θ Aquarii	22 10	98 28	5	+ 0.01	0 0	1	0 00	+ 0.7	10	+ 0.01	+ 1.0
η Aquarii	22 28	90 49	16	+ 0.04	+ 0.8	9	+ 0.01	+ 1.5	9	0 00	+ 1.3
δ Pegasi	22 35	79 53	10	+ 0.03	0 0	4	- 0.01	+ 1.1	5	+ 0.07	+ 0.6
α Phe A (Fomalhaut)	22 50	120 21	13	+ 0.01	+ 0.1	8	+ 0.05	+ 0.6	7	+ 0.08	+ 0.7
ϵ Pegasi (Markab)	22 58	75 32	16	- 0.02	+ 1.1	4	- 0.01	+ 2.1	4	- 0.06	+ 1.8
γ Pismum	23 10	87 28	18	- 0.02	0 0	8	- 0.03	+ 1.0	4	0 00	+ 0.4
α Pismum	23 20	89 30	12	- 0.05	+ 0.7	12	- 0.01	+ 1.2	8	0 00	+ 1.1
δ Pismum	23 33	85 7	10	- 0.03	- 0.6	11	- 0.01	+ 0.4	7	- 0.02	+ 0.6
γ Cephei	23 34	13 8	...	.....	.....	...	.....	.....	3	+ 0.36	- 1.9
δ Sculptoris	23 42	115 53	7	- 0.03	+ 1.3	13	+ 0.01	+ 1.7	11	0 00	+ 1.9
ω Pismum	23 53	83 54	9	- 0.03	- 0.3	5	- 0.05	+ 0.5	11	- 0.02	+ 0.9

Page	No.	Date and Subject	Fee	Book	Page	No.	Date and Subject	Fee	Book
No Separate Results for 1888									
1	5	May 10	See of P. D.	10 00	14 00	150	894	See. Var. R. A.	0 0000
1	10	Oct. 10	Magnitude	10 00	10 00	150	895	Proper Motion to R. A.	0 0000
10	10	Oct. 10	See of R. A.	10 00	10 00	150	896	Proper Motion to R. A.	0 0000
10	10	Nov. 10	"	10 00	10 00	150	897	See Var. to P. D.	0 0000
10	10	July 10	Magnitude	10 00	10 00	150	898	See Var. to R. A.	0 0000
10	10	Aug. 10	See of R. A.	10 00	10 00	150	899	See Var. to P. D.	0 0000
10	10	Oct. 10	See of R. A.	10 00	10 00	150	900	See Var. to R. A.	0 0000
No Mass Positions for 1889									
10	1	See of R. A.	10 00	10 00	150	901	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	902	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	903	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	904	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	905	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	906	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	907	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	908	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	909	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	910	See Var. to R. A.	0 0000	
No Separate Results for 1890									
10	1	See of R. A.	10 00	10 00	150	911	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	912	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	913	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	914	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	915	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	916	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	917	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	918	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	919	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	920	See Var. to R. A.	0 0000	
No Mass Positions for 1891									
10	1	See of R. A.	10 00	10 00	150	921	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	922	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	923	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	924	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	925	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	926	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	927	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	928	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	929	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	930	See Var. to R. A.	0 0000	
No Mass Positions for 1892									
10	1	See of R. A.	10 00	10 00	150	931	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	932	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	933	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	934	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	935	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	936	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	937	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	938	See Var. to R. A.	0 0000	
10	1	See of R. A.	10 00	10 00	150	939	See Var. to P. D.	0 0000	
10	1	See of R. A.	10 00	10 00	150	940	See Var. to R. A.	0 0000	



SEPARATE RESULTS
OF
OBSERVATIONS
MADE WITH THE
MADRAS MERIDIAN CIRCLE
IN THE YEAR
1862.

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires	Mean Polar Distance. 1862.			Magnitude.
				h	m.	s.		°	'	"	
1	21 Andromedæ α	Sep. 20	M	0	1	15.69	...	61	40	19.0	...
	"	Oct. 10	S		1	15.44	...		40	18.1	...
	"	" 11	S		1	15.49	6		40	18.8	...
	"	" 13	S		1	15.48	...		40	18.1	...
2	47371 Lalande	Oct. 21	R	0	2	51.21	4	93	19	45.5	...
	"	" 25	R		2	51.09	...		19	45.3	...
	"	" 27	R		2	51.01	5		19	45.8	...
	"	" 28	R		2	51.08	5		19	45.6	...
3	88 Pegasi γ	Sep. 11	R	0	6	7.93	...	75	35	2.3	...
	"	Dec. 3	M		6	7.91	...		35	1.8	...
4	48 Taylor	Aug. 26	S	0	10	42.55	...	89	4	42.7	...
	"	Sep. 6	R		10	42.48	5		4	43.9	...
	"	" 18	M		10	42.55	...		4	43.3	...
	"	Oct. 8	S		10	42.73	6		4	42.0	...
	"	" 9	S		10	42.59	...		4	42.3	...
	"	" 10	S		10	42.56	...		4	43.9	...
	"	" 11	S		10	42.44	...		4	44.4	...
	"	" 13	S		10	42.62	...		4	43.7	...
	"	" 14	S		10	42.46	5		4	41.6	...
	"	" 15	S		10	42.55	...		4	44.1	...
	"	" 16	R		10	42.43	...		4	43.9	...
	"	" 17	R		10	42.58	...		4	44.6	...
	"	" 23	R		10	42.51	...		4	41.0	...
	"	" 25	R		10	42.55	4		4	44.0	...
	"	" 27	R		10	42.43	6		4	44.6	...
	"	" 28	R		10	42.48	6		4	43.0	...
	"	" 31	R		10	42.47	...		4	42.9	...
	"	Nov. 1	M		10	42.39	...		4	44.1	...
5	41 Pegasus δ	Aug. 12	M	0	13	29.79	...	82	34	35.0	...
	"	Sep. 8	R		13	29.86	...		34	35.0	...
	"	Oct. 6	S		13	29.96	...		34	33.2	...
	"	" 7	S		13	29.94	...		34	33.6	...
	"	Nov. 3	M		13	29.87	...		34	31.5	...
6	44 Pegasus	Aug. 26	S	0	14	19.92	...	88	40	28.7	...
	"	" 27	S		14	19.57	5		40	28.2	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				A.	m.	s.		°	'	"	
6	44 Piscium ...	Oct. 7	S	0	18	19.52	4	88	49	28.2	...
		" 9	S		18	19.57	5		49	28.5	...
		" 10	S		18	19.53	...		49	29.1	...
		" 16	R		18	19.72	...		49	30.3	...
		" 23	R		18	19.72	5		49	30.7	...
		" 25	R		18	19.84	6		49	29.3	...
		" 27	R		18	19.74	6		49	29.3	...
		" 28	R		18	19.72	...		19	28.9	...
		" 31	R		18	19.62	5		49	30.0	...
7	12 Ceti ...	Sep. 10	R	0	22	59.79	...	94	43	13.6	...
		" 22	S		22	59.79	...		43	14.8	...
		Oct. 31	R		22	59.73	5		43	13.6	...
		Dec. 1	M		22	59.74	...		43	13.2	...
		" 2	M		22	59.75	...		43	13.3	...
8	670 Lalande ...	Sep. 6	R	0	23	3.04	5	85	54	13.6	...
		" 16	M		23	3.00	...		54	14.4	7.0
		" 17	M		23	2.93	...		54	14.0	7.0
		" 30	M		23	2.76	...		54	15.1	...
		Oct. 1	S		23	3.05	...		54	12.6	...
		" 2	S		23	3.00	...		54	13.2	...
		" 4	S		23	2.97	...		54	13.1	...
		" 6	S		23	3.22	...		54	13.0	...
		" 11	S		23	3.13	...		54	13.4	...
		" 14	S		23	2.92	5		54	13.3	...
		" 15	S		23	3.27	...		54	13.8	...
		" 17	R		23	3.19	3		54	15.2	...
9		Nov. 6	M	0	28	47.47	...	89	8	14.7	9.0
		" 11	M		28	47.44	...		8	13.7	9.0
		" 22	S		28	47.73	...		8	13.7	9.0
10	15 Ceti ...	Aug. 27	S	0	31	1.09	...	91	15	46.4	...
		Oct. 9	S		31	1.13	...		15	45.6	...
		" 16	R		31	1.15	...		15	47.8	...
		" 17	R		31	1.25	3		15	48.1	...
11	1097 Lalande ...	Nov. 5	M	0	34	29.68	...	89	0	36.2	8.0
		" 7	M		34	29.68	...		0	35.5	8.0

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862:			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
11	1097 Lalande ...	Nov. 12	M	0	34	29.70	...	89	0	30.5	8.0
	... ..	Dec. 10	M		34	29.85	5		0	31.5	8.0
12	1123 Lalande ..	Nov. 22	S	0	35	35.68	5	89	3	41.0	8.5
	... ..	" 25	S		35	35.87	6		3	40.6	...
13	16 Ceti β. ...	Aug. 26	S	0	36	39.52	...	108	44	38.8	...
	... ..	Sep. 15	R		36	39.55	5		44	42.2	...
	... ..	Oct. 8	S		36	39.57	...		44	40.3	...
	... ..	" 31	R		36	39.63	...		44	41.2	...
	... ..	Nov. 20	S		36	39.61	...		44	40.0	...
14	1198 Lalande ...	Nov. 6	M	0	38	0.50	...	88	56	56.2	8.5
15	60 Piscium ...	Sep. 30	M	0	40	15.36	...	81	0	45.2	...
	... ..	Oct. 1	S		40	15.48	...		0	46.4	...
	... ..	" 2	S		40	15.47	...		0	46.1	...
	... ..	" 4			40	15.47	...		0	46.1	...
16	235 Taylor ...	Oct. 21	R	0	41	8.87	4	85	25	47.5	...
	... ..	" 27	R		41	8.77	6		25	47.2	...
	... ..	" 28	R		41	8.82	...		25	47.1	...
	... ..	Nov. 3	M		41	8.81	...		25	46.9	...
17	63 Piscium β ...	Aug. 27	S	0	41	31.25	...	83	9	59.3	...
	... ..	Sep. 9	R		41	31.53	...		10	07	...
	... ..	" 10	R		41	31.44	...		10	00	...
	... ..	" 13	R		41	31.51	...		9	59.9	...
	... ..	" 16	M		41	31.45	...		10	06	...
	... ..	" 17	M		41	31.41	...		10	03	...
	... ..	" 18	M		41	31.51	...		9	59.7	...
	... ..	" 22	S		41	31.32	6		10	2.3	...
	... ..	" 23	M		41	31.43	6		10	00	...
	... ..	Oct. 6	S		41	31.78	5		9	58.4	...
	... ..	Dec. 1	M		41	31.52	...		10	06	...
18	... ..	Nov. 4	M	0	41	33.88	...	89	7	11.9	9.5
	... ..	" 7	M		41	33.98	...		7	11.4	9.0
	... ..	" 11	M		41	33.97	...		7	11.3	9.0

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1862.			No. of Wires.	Mean Polar Distance 1862.			Magnitude.
				A.	m.	s.		°	'	"	
19	20 Ceti	Sep. 1	P	0	45	57.53	6	91	53	41.6	...
	...	" 6	R		45	57.33	6		53	40.3	...
	...	" 8	R		45	57.43	4		53	40.6	...
	...	" 11	R		45	57.30	...		53	39.5	...
	...	" 12	R		45	57.25	5		53	39.2	...
	...	" 15	R		45	57.31	5		53	40.8	...
	...	" 23	M		45	57.09	4		53	40.5	...
	...	" 27	M		45	57.12	5		53	40.7	...
	...	" 30	M		45	57.25	4		53	41.0	...
	...	Oct. 3	S		45	57.40	...		53	39.8	...
	...	" 23	R		45	57.33	...		53	41.1	...
	...	" 25	R		45	57.34	3		53	39.9	...
	...	" 31	R		45	57.29	6		53	40.2	...
	...	Nov. 1	M		45	57.32	...		53	40.9	...
20	0.806 W. B. E.	Nov. 5	M	0	46	33.67	...	68	50	25.0	10.0
	...	" 22	S		46	33.72	5		50	24.7	10.0
	...	" 25	S		46	33.78	6		50	25.0	...
21	2 Ursæ Minoris	Sep. 10	R	0	50	30.17	3	4	29	9.4	...
22	1638 Lalande	Oct. 28	R	0	50	34.39	...	68	57	43.6	...
	...	Nov. 3	M		50	34.34	...		57	44.1	7.5
	...	" 6	M		50	34.36	...		57	43.4	8.0
23	1639 Lalande	Nov. 7	M	0	50	36.19	6	68	39	13.1	8.5
	...	" 11	M		50	36.20	5		39	12.0	8.5
	...	" 13	M		50	36.15	...		39	13.7	...
24	1784 Lalande	Oct. 31	R	0	54	52.73	...	68	13	8.7	...
	...	Nov. 12	M		54	52.86	...		13	8.2	8.0
	...	" 15	M		54	52.77	...		13	6.2	8.0
25	71 Piscium	Aug. 28	S	0	55	47.18	...	82	51	13.3	...
	...	Sep. 9	R		55	46.90	...		51	13.3	...
	...	" 10	R		55	46.93	5		51	13.3	...
	...	Nov. 4	M		55	46.90	...		51	12.2	...
26	26 Ceti	Sep. 11	R	0	56	42.92	6	80	23	25.7	...
	...	" 12	R		56	42.94	...		23	24.8	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
26	26 Ceti	Sep. 13	R	0	56	42.03	6	89	22	25.2	...
	...	" 15	R		56	42.93	...		22	26.9	...
	...	" 16	M		56	42.93	6		22	25.6	...
	...	" 18	M		56	43.01	5		22	26.3	...
	...	" 22	S		56	42.83	...		22	27.0	...
	...	" 23	M		56	42.82	...		22	27.6	...
	...	Oct. 11	S		56	43.10	...		22	26.3	...
	...	" 13	S		56	42.94	...		22	25.9	...
	...	" 14	S		56	42.99	...		22	26.5	...
	...	" 15	S		56	43.01	...		22	26.0	...
	...	" 16	R		56	42.78	...		22	27.2	...
	...	" 21	R		56	42.98	...		22	26.2	...
	...	" 23	R		56	42.86	...		22	26.1	...
	...	" 27	R		56	42.98	...		22	26.7	...
27	1879 Lalande	Oct. 28	R	0	57	37.82	...	83	25	33.8	7.8
	...	Nov. 6	M		57	37.70	...		25	34.5	7.5
	...	" 14	M		57	37.73	...		25	33.5	7.5
28	0.1031 W. B. E.	Nov. 6	M	0	59	1.83	...	88	6	27.3	9.0
	...	" 22	S		59	1.75	4		6	28.4	9.0
	...	Dec. 2	M		59	1.71	...		6	27.4	9.0
29	29 Ceti	Nov. 29	S	1	0	52.70	...	88	43	47.2	...
		Dec. 3	M		0	52.78	...		43	45.9	7.0
30	80 Piscium ϵ	Aug. 26	S	1	1	15.71	...	85	4	51.2	...
	...	" 27	S		1	15.66	...		4	52.8	...
	...	" 28	S		1	15.99	...		4	52.7	...
	...	Sep. 1	P		1	15.76	6		4	53.8	...
	...	" 6	R		1	15.75	6		4	52.1	...
	...	" 8	R		1	15.73	6		4	52.7	...
	...	" 9	R		1	15.78	...		4	53.4	...
	...	" 11	R		1	15.79	5		4	53.7	...
	...	" 12	R		1	15.70	5		4	51.7	...
	...	" 13	R		1	15.82	6		4	53.0	...
	...	Oct. 7	S		1	15.72	...		4	51.4	...
	...	" 8	S		1	15.77	3		4	51.0	...
	...	" 9	S		1	15.73	...		4	52.1	...
	...	" 10	S		1	15.72	...		4	53.6	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				A.	W.	S.		"	"	"	
30	80 Piscium e	Oct. 14	S	1	1	15-74	...	85	4	53-0	...
	... ..	" 15	S		1	16-05	4		4	53-3	...
	... ..	" 17	R		1	15-73	6		4	53-4	...
31	I. 15 W. B. E.	Nov 11	M	1	2	53-51		87	30	17-6	9-0
32	2089 Lalande	Oct. 28	R	1	3	21-30		89	10	51-2	8-3
	... ..	Nov. 12	M		3	21-16	...		10	53-3	8-5
	... ..	" 15	M		3	21-18	...		10	52-0	8-5
33	33 Ceti	Oct. 31	R	1	3	27-54	...	89	17	23-5	...
	... ..	Nov. 1	M		3	27-52	...		17	23-9	...
	... ..	" 13	M		3	27-61	...		17	23-5	...
34	I. 101 W. B. E.	Nov. 5	M	1	7	39-50	...	87	54	36-6	9-0
	... ..	" 6	M		7	39-60	...		54	36-2	9-0
	... ..	" 22	S		7	39-91	...		54	37-3	9-0
35	...	Oct. 28	R	1	9	9-00	6	87	42	42-1	10-0
	... ..	" 31	R		9	10-02	5		42	43-6	...
	... ..	Dec. 1	M		9	9-84	5		42	42-8	10-0
36	80 Piscium f	Sep. 30	M	1	10	40-85	...	87	6	40-6	...
	... ..	Oct. 1	S		10	40-95	6		6	40-8	...
	... ..	" 2	S		10	40-97	...		6	47-3	...
	... ..	" 3	S		10	40-90	...		6	47-7	...
	... ..	" 4	S		10	40-77	...		6	47-0	...
	... ..	" 7	S		10	40-98	...		6	46-5	...
	... ..	" 8	S		10	41-17	...		6	46-2	...
	... ..	" 9	S		10	40-94	...		6	46-3	...
	... ..	" 10	S		10	40-78	...		6	48-2	...
	... ..	" 11	S		10	41-06	...		6	47-1	...
	... ..	" 15	S		10	41-05	...		6	48-1	...
	... ..	" 16	R		10	40-90	...		6	48-2	...
	... ..	" 18	R		10	41-13	...		6	48-4	...
37	43 Ceti	Oct. 1	S	1	15	31-47	6	91	10	19-9	...
	... ..	" 2	S		15	31-38	...		10	20-5	...
	... ..	" 3	S		15	31-56	...		10	21-3	...
	... ..	" 4	S		15	31-49	...		10	20-6	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
37	43 Ceti	Oct. 9	S	1	15	31.34	...	91	10	20.1	...
	... ..	" 13	S		15	31.34	...		10	21.6	...
	... ..	" 15	S		15	31.29	...		10	22.5	...
	... ..	" 16	R		15	31.41	...		10	22.0	...
38	45 Ceti θ	Oct. 27	R	1	17	7.61	4	98	53	47.3	...
	... ..	" 31	R		17	7.54	5		53	47.2	...
	... ..	Nov. 26	S		17	7.47	...		53	47.2	...
	... ..	" 28	S		17	7.32	...		53	48.5	...
39	93 Piscium ρ	Oct. 8	S	1	18	40.25	...	71	32	40.3	...
40	465 Taylor	Sep. 30	M	1	19	23.48	6	91	7	3.0	...
	... ..	Nov. 22	S		19	23.60	...		7	2.4	7.0
	... ..	" 25	S		19	23.76	4		7	2.9	...
41	98 Piscium μ	Aug. 26	S	1	22	57.55	...	84	34	6.5	...
	... ..	" 27	S		22	57.33	3		34	6.8	...
	... ..	Sep. 9	R		22	57.34	5		34	8.3	...
	... ..	" 13	R		22	57.52	5		34	7.7	...
	... ..	" 16	M		22	57.28	...		34	8.2	...
	... ..	" 23	M		22	57.34	...		34	7.9	...
	... ..	" 27	M		22	57.17	...		34	8.1	...
											
42	99 Piscium η	Sep. 10	R	1	24	6.13	...	75	22	1.2	...
	... ..	" 11	R		24	6.16	...		22	1.0	...
	... ..	Oct. 7	S		24	6.06	...		21	38.9	...
	... ..	" 9	S		24	6.23	...		22	0.1	...
	... ..	" 28	R		24	6.19	...		22	0.9	...
	... ..	Nov. 20	S		24	6.18	...		22	1.4	...
	... ..	" 24	S		24	6.20	6		22	1.4	...
43	514 Taylor	Dec. 1	M	1	28	27.10	...	73	16	27.0	6.0
	... ..	" 2	M		28	26.98	...		16	27.6	6.0
44	106 Piscium ν	Aug. 20	S	1	34	15.13	...	88	12	42.7	...
	... ..	" 24	S		34	15.22	...		12	42.3	...
	... ..	Sep. 6	R		34	15.10	2		12	43.3	...
	... ..	" 8	R		34	15.20	...		12	43.3	...
	... ..	" 10	R		34	15.04	...		12	43.9	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1862.			No. of Wires.	Mean Polar Distance 1862.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
44	106 Piscium ν	Sep. 11	R	1	34	15.02	...	85	12	43.7	...
	...	" 12	R		34	15.15	6		12	43.2	...
	...	" 13	R		34	15.03	6		12	43.6	...
	...	" 15	R		34	15.15	6		12	44.1	...
	...	" 16	M		34	15.10	...		12	43.1	...
	...	" 17	M		34	15.11	...		12	43.3	...
	...	" 18	M		34	15.26	...		12	43.9	...
	...	" 23	M		34	15.13	...		12	44.5	...
	...	Nov. 12	M		34	15.14	...		12	42.3	...
	...	" 13	M		34	15.11	...		12	45.0	...
	...	" 20	S		34	14.99	...		12	43.0	...
	...	" 24	S		34	14.98	5		12	44.7	...
	...	" 28	S		34	15.27	...		12	44.3	...
	...	Dec. 3	M		34	15.06	...		12	43.9	...
	...	" 4	M		34	15.08	...		12	43.3	...
	...	" 6	M		34	15.18	...		12	44.1	...
	...	" 10	M		34	15.12	...		12	44.3	...
45	590 Taylor	Sep. 10	R	1	41	17.31	...	87	0	18.7	...
	...	" 11	R		41	17.26	...		0	18.9	...
	...	" 17	M		41	17.02	4		0	18.0	...
	...	" 18	M		41	17.17	...		0	17.6	...
46	111 Piscium ξ	Sep. 6	R	1	46	24.86	4	87	29	41.5	...
	...	" 8	R		46	24.60	...		29	42.0	...
	...	" 15	R		46	24.78	5		29	43.7	...
	...	" 16	M		46	24.47	...		29	43.7	...
	...	" 23	M		46	24.78	6		29	46.1	...
47	6 Arietis β	Aug. 28	S	1	47	1.03	4	69	52	6.4	...
	...	Sep. 1	P		47	1.26	...		52	5.0	...
	...	" 10	R		47	1.30	...		52	5.9	...
	...	" 11	R		47	1.29	...		52	6.0	...
	...	" 12	R		47	1.37	...		52	6.3	...
	...	" 13	R		47	1.31	...		52	6.5	...
	...	Nov. 4	M		47	1.43	5		52	6.8	...
	...	" 6	M		47	1.30	...		52	6.1	...
	...	" 11	M		47	1.26	...		52	5.9	...
	...	" 12	M		47	1.33	...		52	6.6	...
	...	" 22	S		47	1.21	...		52	6.4	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
47	6 Arietis β	Nov. 24	S	1	47	1.34	...	60	52	6.2	...
	...	" 26	S		47	1.35	...		52	6.4	...
	...	" 28	S		47	1.31	...		52	6.7	...
	...	Dec. 4	M		47	1.33	...		52	6.6	...
48	13 Arietis α	Sep. 1	P	1	59	24.05	...	67	11	32.1	...
	...	" 15	R		59	23.03	...		11	32.8	...
	...	Oct. 9	S		59	23.91	...		11	30.0	...
	...	" 10	S		59	23.80	...		11	32.3	...
	...	Nov. 4	M		59	24.00	...		11	31.9	...
	...	" 8	M		59	23.82	...		11	30.7	...
	...	" 20	S		59	23.97	...		11	29.8	...
	...	" 29	S		59	23.89	...		11	32.0	...
	...	Dec. 4	M		59	23.92	...		11	32.4	...
	...	" 5	M		59	24.03	...		11	32.5	...
49	21 Arietis	Nov. 11	M	2	7	53.42	...	65	35	54.2	6.5
	...	Dec. 1	M		7	53.36	...		35	56.0	7.0
	...	" 5	M		7	53.10	...		35	55.6	...
50	67 Ceti	Oct. 31	R	2	10	5.93	...	97	3	35.1	...
	...	Nov. 8	M		10	6.00	...		3	35.4	...
	...	" 22	S		10	6.03	...		3	35.8	...
	...	" 26	S		10	6.02	...		3	35.7	...
	...	" 29	S		10	6.06	...		3	37.2	...
	...	Dec. 10	M		10	5.97	...		3	36.6	...
51	22 Arietis θ	Oct. 9	S	2	10	27.15	...	70	44	20.3	...
52	68 Ceti α . Var 1	Oct. 28	R	2	12	22.55	...	93	36	21.5	5.5
	...	Nov. 3	M		12	22.40	4		36	22.4	5.5
	...	" 4	M		12	22.62	...		36	22.3	6.0
53	73 Ceti ζ	Nov. 11	M	2	20	49.56	5	82	9	37.7	...
	...	" 12	M		20	49.39	...		9	37.7	...
	...	" 22	S		20	49.57	...		9	38.2	...
	...	" 25	S		20	49.52	...		9	38.1	...
	...	" 29	S		20	49.57	...		9	39.6	...
	...	Dec. 1	M		20	49.48	...		9	37.5	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1862.			No. of Wires	Mean Polar Distance 1862.			Magnitude.
				h.	m.	s.		°	'	"	
54	26 R. P. L.	Nov. 7	M	2	21	56.85	5	3	33	29.0	...
	...	" 8	M		21	56.70	3		33	29.0	...
	...	" 15	M		21	58.61	7		33	30.5	...
55	31 Arietis	Dec. 2	M	2	29	6.58	...	78	9	11.0	...
	...	" 3	M		29	6.60	5		9	11.1	...
56	32 Arietis v	Sep. 11	R	2	30	59.20	5	68	38	16.1	...
57	80 Ceti γ	Nov. 8	M	2	36	9.07	...	87	20	51.4	...
	...	" 25	S		36	9.13	...		20	53.0	...
	...	Dec. 6	M		36	9.09	...		20	51.9	...
	...	" 10	M		36	9.14	...		20	53.1	...
58	42 Arietis v	Sep. 11	R	2	41	35.86	...	73	6	45.1	...
59	48 Arietis v	Oct. 10	S	2	51	19.54	...	69	12	50.4	...
	...	Nov. 5	M		51	19.64	...		12	50.5	...
60	92 Ceti α	Nov. 8	M	2	55	4.02	...	86	27	13.4	...
	...	" 25	S		55	3.99	5		27	14.5	...
61	33 R. P. L.	Dec. 1	M	3	0	16.70	5	5	35	17.0	...
	...	" 2	M		0	17.10	3		35	17.4	...
62	57 Arietis δ	Nov. 5	M	3	3	44.63	...	70	47	53.8	...
	...	" 6	M		3	44.58	...		47	53.4	...
63	58 Arietis δ	Dec. 3	M	3	6	58.55	4	60	28	11.3	...
	...	" 4	M		6	58.22	...		28	10.8	...
64	...	Nov. 29	S	3	12	18.91	5	130	58	40.2	8.0
65	33 Persæ α	Dec. 11	M	3	14	29.21	...	40	38	1.7	...
66	17 Tauri	Nov. 6	M	3	36	41.22	...	66	19	25.1	...
	...	" 7	M		36	41.23	...		19	25.2	...
67	...	Nov. 29	S	3	38	1.08	...	136	13	17.3	8.0

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
68	25 Tauri η	Nov. 25	S	3	39	17.11	...	66	19	30.1	...
	... ..	Dec. 6	M		39	17.05	...		19	29.0	...
	... ..	" 11	M		39	17.13	...		19	29.5	...
69	34 Eridani γ^1	Dec. 2	M	3	51	35.43	...	103	54	11.0	...
	... ..	" 6	M		51	35.52	...		54	12.5	...
70	... ..	Nov. 29	S	3	53	0.15	5	125	25	47.3	10.0
71	35 Tauri λ . Var 1	Nov. 25	S	3	53	2.16	...	77	54	10.5	...
72	37 Tauri Λ^1	Dec. 4	M	3	56	32.43	...	68	17	55.8	...
	... ..	" 6	M		56	32.50	...		17	55.5	...
73	... ..	Nov. 29	S	4	3	39.47	5	146	56	47.4	9.0
74	74 Tauri ϵ	Nov. 7	M	4	20	33.86	...	71	7	45.0	...
	... ..	" 8	M		20	33.79	...		7	44.7	...
	... ..	Dec. 4	M		20	33.53	...		7	46.3	...
	... ..	" 8	M		20	33.76	...		7	45.3	...
75	67 Tauri α	Dec. 8	M	4	28	0.29	...	73	46	18.5	...
76	3 Aurigæ ϵ	Dec. 8	M	4	48	0.57	...	57	3	23.5	...
	... ..	" 9	M		48	0.76	...		3	25.4	...
77	109 Tauri α	Dec. 5	M	5	10	59.17	...	68	3	0.4	6.0
78	112 Tauri β	Nov. 8	M	5	17	34.31	...	61	30	47.8	...
	... ..	Dec. 5	M		17	34.00	...		30	50.1	...
79	40 R. P. L.	Dec. 8	M	5	18	8.42	3	4	53	10.3	...
80	123 Tauri ζ	Nov. 8	M	5	29	23.09	...	68	56	43.2	...
81	... ..	Dec. 8	M	5	49	21.27	3	63	50	15.9	...
82	43 R. P. L.	Dec. 9	M	5	51	7.35	3	3	14	23.0	...
83	13 Geminorum μ	Dec. 9	M	6	14	36.60	...	67	25	9.7	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Stars.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
84	24 Geminorum γ	Dec. 8	M	6	29	44.39	...	73	20	13.2	...
	... ..	" 9	M		29	44.34	...		29	11.9	...
85	68 Geminorum. ...	Dec. 9	M	7	25	43.71	...	73	62	60.3	...
86	51 Geminorum η ...	Dec. 8	M	7	38	7.88	...	71	9	24.2	...
	... ..	" 9	M		38	7.84	...		9	24.1	...
87	70 R. P. L. ... s.p.	Oct. 7	S	9	45	55.84	6	6	25	14.4	...
88	72 R. P. L. ... s.p.	Sep. 6	R	10	9	0.83	5	5	3	3.2	...
	 s.p.	Oct. 2	S		9	0.22	7		3	3.2	...
	 s.p.	" 13	S		9	0.02	5		3	3.7	...
	 s.p.	" 15	S		9	0.41	3		3	1.5	...
	 s.p.	" 16	R		9	0.54	3		3	2.3	...
	 s.p.	Nov. 3	M		9	0.73	5		3	3.1	...
	 s.p.	" 5	M		9	0.62	5		3	2.3	...
	 s.p.	" 6	M		9	1.05	3		3	2.8	...
	 s.p.	" 11	M		9	1.20	5		3	2.0	...
	 s.p.	" 13	M		9	0.19	3		3	2.1	...
89	79 R. P. L. ... s.p.	Oct. 28	R	10	54	55.00	3	1	36	45.1	...
90	89 R. P. L. ... s.p.	Sep. 10	R	11	57	44.31	3	3	38	62.3	...
	 s.p.	Nov. 7	M		57	44.59	5		38	62.2	...
	 s.p.	Dec. 1	M		57	45.57	3		38	64.5	...
91	2 Corvi α	June 3	M	12	3	1.90	6	111	51	7.8	...
	... ..	" 4	M		3	1.74	...		51	9.0	...
	... ..	" 5	M		3	1.81	...		51	8.1	...
92	92 R. P. L. ... s.p.	Nov. 15	M	12	12	50.01	3	2	47	49.5	...
93	93 R. P. L. ... s.p.	Nov. 4	M	12	14	20.34	3	1	32	7.8	...
94	21 Virginis η ...	June 7	M	12	26	39.49	6	98	41	26.0	...
95	9 Corvi β ...	June 3	M	12	27	5.70	4	113	38	0.0	...
	... ..	" 4	M		27	5.49	...		38	0.4	...
	... ..	" 5	M		27	8.49	...		38	1.3	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
96	67 Virginia α ...	June 3	M	13	17	55.68	6	100	26	25.2	...
	... ..	" 6	M		17	55.57	...		26	26.3	...
97	103 R. P. L. ... s.p.	Nov. 8	M	13	20	20.74	3	4	31	25.7	...
98	79 Virginia β ...	June 4	M	13	27	39.80	6	50	53	22.7	...
	... ..	" 9	R		27	39.82	...		53	22.4	...
99	55 Ursa Majoris γ ...	June 9	R	13	42	6.02	...	39	59	49.7	...
100	8 Bootis γ ...	June 7	M	13	48	6.50	4	70	54	34.3	...
	... ..	" 10	R		48	6.69	...		54	31.6	...
101	93 Virginia γ ...	June 16	S	13	54	37.61	...	87	47	10.4	...
102	108 R. P. L. ...	June 6	M	14	4	11.73	5	3	34	54.2	...
103	16 Bootis α ...	June 7	M	14	9	22.13	...	70	5	52.4	...
	... ..	" 10	R		9	22.02	...		5	52.2	...
	... ..	" 16	S		9	22.07	...		5	51.0	...
	... ..	" 21	S		9	21.91	...		5	51.7	...
104	100 Virginia λ ...	June 9	R	14	11	38.72	...	102	44	2.4	...
105	25 Bootis ρ ...	June 2	P	14	25	52.99	6	59	1	18.7	...
	... ..	" 3	M		25	52.70	3		1	17.9	...
	... ..	" 7	M		25	52.93	...		1	16.8	...
	... ..	" 10	R		25	52.93	...		1	17.8	...
	... ..	" 16	S		25	52.88	...		1	17.1	...
106	5 Librae ...	June 9	R	14	39	21.39	...	104	52	32.9	...
107	36 Bootis ε ...	June 6	M	14	38	57.55	...	62	20	34.4	...
	... ..	" 10	R		38	57.63	...		20	31.7	...
	... ..	" 19	S		38	57.59	...		20	33.6	...
108	9 Librae α ³ ...	May 31	P	14	43	14.70	...	105	27	59.0	...
		June 7	M		43	14.83	6		27	56.7	...
109	7 U. Minoris β ...	June 19	S	14	51	8.40	...	15	16	51.9	...
		July 8	S		51	8.43	...		16	50.1	...

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Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				A.	m.	s.		°	'	"	
110	43 Bootis ϕ ...	June 2	P	14	58	31.97	6	62	30	46.1	...
	... ..	" 3	M		58	31.95	6		30	46.7	...
	... ..	" 4	M		58	32.16	5		30	46.2	...
111	24 Libræ ϵ ...	June 9	R	15	4	21.54	6	109	16	1.9	...
	... ..	" 10	R		4	21.50	...		16	1.3	...
112	111 R. P. L. ...	June 5	M	15	5	58.16	5	5	30	59.3	...
	... ..	" 19	S		5	58.05	5		31	0.7	...
113	27 Libræ β ...	May 31	P	15	9	34.93	...	98	52	18.7	...
	... ..	June 16	S		9	34.81	...		52	16.1	...
	... ..	" 21	S		9	34.90	...		52	16.4	...
114	32 Libræ γ^1 ...	June 9	R	15	20	28.60	6	106	13	57.4	...
	... ..	" 10	R		20	28.69	...		13	57.4	...
115	114 R. P. L. ... a.p.	Dec. 2	M	15	23	16.62	1	2	14	37.9	...
116	5 Coronæ Borealis α ...	May 31	P	15	28	50.84	6	62	49	9.1	...
	... ..	June 4	M		28	50.72	...		49	10.0	...
	... ..	" 12	R		28	50.70	...		49	7.2	...
	... ..	" 16	S		28	50.88	...		49	7.4	...
	... ..	" 21	S		28	50.84	...		49	8.7	...
	... ..	July 4	R		20	50.68	...		49	7.4	...
117	24 Serpentis α ...	May 31	P	15	37	28.38	6	83	8	17.6	...
	... ..	July 8	S		37	28.11	6		8	15.2	...
118	115 R. P. L. ...	June 5	M	15	49	0.87	5	4	43	35.0	...
119	16 Urræ Minoris γ ...	July 22	M	15	49	1.15	...	11	46	58.0	...
120	7 Scorpii δ ...	Jan'y 8	S	15	52	10.41	...	112	13	32.7	...
121	8 Scorpii β^1 ...	June 4	M	15	57	24.95	...	109	25	29.6	...
		" 9	R		57	25.00	...		25	29.6	...
		" 11	R		57	25.01	...		25	29.1	...
		" 19	S		57	24.94	6		25	29.8	...

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Number.	Star.	Date of Observation.		Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
					h.	m.	s.		°	'	"	
121	8 Scorpii β^1 ...	July	4	R	15	57	25.04	...	109	25	28.7	...
		"	8	S		57	25.17	5		25	29.5	...
		"	10	R		57	25.04	5		25	29.6	...
		"	13	R		57	24.96	...		25	28.0	...
		"	23	M		57	24.91	...		25	28.5	...
		"	24	M		57	24.97	...		25	29.5	...
		"	25	M		57	24.90	...		25	28.7	...
		"	26	M		57	24.90	...		25	29.4	...
		"	28	S		57	25.06	6		25	29.3	...
122	1 Ophiuchi δ . ..	June	9	R	16	7	6.20	...	93	20	13.0	...
123	21 Scorpii α ..	June	10	R	16	20	57.06	4	116	7	21.3	...
		"	12	R		20	57.00	...		7	19.8	...
		"	13	R		20	56.63	...		7	20.7	...
		July	15	R		20	56.98	...		7	20.8	...
		"	18	R		20	57.08	...		7	21.3	...
		"	26	M		20	56.94	...		7	21.4	...
		"	30	S		20	56.99	...		7	20.9	...
		Aug.	6	M		20	57.43	...		7	19.0	...
124	S. Ophiuchi Var. β ...	Aug.	2	S	16	26	18.38	...	106	52	3.1	...
125	40 Herculis γ ..	July	12	S	16	36	4.97	...	58	8	45.1	...
		"	15	R		36	5.09	...		8	43.9	...
		"	16	R		36	5.07	...		8	44.5	...
		"	22	M		36	5.10	...		8	44.1	...
		"	23	M		36	5.04	...		8	43.6	...
		"	25	M		36	5.13	...		8	43.7	...
		"	26	M		36	5.08	4		8	44.5	...
		"	28	S		36	4.97	...		8	43.0	...
		"	30	S		36	5.08	...		8	43.8	...
126	27 Ophiuchi α . ..	July	3	P	16	51	8.33	6	80	24	27.2	...
		"	13	S		51	8.29	...		24	28.1	...
		"	16	R		51	8.22	...		24	26.7	...
		"	18	R		51	8.23	...		24	27.8	...
		"	24	M		51	8.23	5		24	27.4	...
		"	28	S		51	8.29	...		24	28.0	...
		"	29	S		51	8.19	...		24	27.0	...

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				A.	m.	s.		°	'	"	
126	27 Ophiuchi κ ..	Aug. 1	S	16	51	8.08	...	80	24	28.0	...
		" 2	S		51	8.17	...		24	28.4	...
127	R. Ophiuchi Var 2 ...	July 28	S	16	59	50.78	...	105	54	19.6	...
		Aug. 1	S		59	50.42	...		54	20.3	...
		" 2	S		59	50.57	...		54	20.3	..
128	22 Ursa Min. ϵ s.p.	Dec. 8	M	17	0	14.63	3	7	44	28.3	-
	s.p.	" 9	M		0	14.41	5		44	31.2	...
129	G4 Hercules α Var 1...	July 3	P	17	8	21.41	...	75	26	58.3	...
	... ..	" 12	S		8	21.31	...		26	59.2	...
	... ..	" 22	M		8	21.28	...		26	58.6	...
	... ..	" 29	S		8	21.38	...		26	58.8	...
	... ..	" 31	S		8	21.20	...		26	58.2	..
130	42 Ophiuchi θ ...	July 3	P	17	13	31.02	6	114	51	29.3	...
	... ..	" 8	S		13	32.13	...		51	29.1	...
	... ..	" 24	M		13	32.17	...		51	29.3	...
	... ..	" 25	M		13	32.06	...		51	29.3	..
131	45 Ophiuchi δ ...	July 8	S	17	18	32.59	...	119	44	17.8	...
	... ..	Aug. 5	M		18	32.71	...		44	16.3	...
132	55 Ophiuchi α ...	June 13	R	17	28	31.77	...	77	20	14.0	...
	... ..	July 4	R		28	31.67	...		20	12.6	...
	... ..	" 19	R		28	31.71	...		20	12.6	...
	... ..	" 22	M		28	31.83	...		20	12.6	...
	... ..	" 23	M		28	31.56	6		20	13.4	...
	... ..	" 26	M		28	31.84	...		20	12.7	...
	... ..	" 31	S		28	31.77	...		20	12.9	...
	... ..	Aug. 2	S		28	31.68	...		20	12.3	...
133	—Scorpii κ	July 25	M	17	32	56.56	...	128	57	16.7	...
		" 29	S		32	56.60	5		57	16.3	...
		" 31	S		32	56.44	...		57	16.3	...
134		July 28	S	17	37	31.91	5	126	29	14.6	...
		Aug. 1	S		37	31.65	...		29	14.9	...

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				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
135		Aug. 2	S	17	39	35.46	...	127	14	31.4	...
136	86 Hercules μ	June 21	S	17	41	3.57	...	62	11	47.7	...
	... ..	July 19	R		41	3.47	...		11	48.5	...
	... ..	" 22	M		41	3.34	...		11	46.3	...
137	8282 Taylor ...	July 25	M	17	47	59.31	...	131	41	32.3	7.0
	... ..	" 29	S		47	59.48	...		41	31.4	...
138	7499 Lacaille	Aug. 1	S	17	48	6.97	...	129	4	38.1	...
139	7504 Lacaille	July 23	M	17	48	23.61	...	129	6	45.2	...
	... ..	Aug. 2	S		48	23.75	5		6	47.4	...
140	33 Draconis γ	June 21	S	17	53	24.35	...	38	29	38.2	..
141	—Sagittarii γ^1	Aug. 5	M	17	56	12.29	...	119	34	55.1	...
142	8355 Taylor ...	July 12	S	17	56	51.23	...	133	25	37.6	...
	... ..	" 23	S		56	51.11	...		25	38.4	...
	... ..	" 29	S		56	51.17	...		25	38.7	...
143	... ..	Aug. 2	S	18	1	5.15	6	131	43	37.7	...
	... ..	" 16	S		1	5.20	...		43	33.8	...
144	13 Sagittarii μ	Sep. 3	M	18	5	30.59	...	111	5	27.2	...
145	7622 Lacaille	Aug. 16	S	18	5	53.38	4	133	12	18.2	..
146	7644 Lacaille	July 16	R	18	8	48.12	5	132	20	3.0	...
147	8461 Taylor ...	Aug. 16	S	18	14	16.80	...	134	9	26.8	...
148	22 Sagittarii λ	Sep. 3	M	18	19	27.12	...	115	29	37.1	...
149		Aug. 16	S	18	22	42.21	...	135	15	52.6	...
150	3 Lyræ α	Aug. 20	S	18	32	15.68	...	51	20	33.4	...
		" 23	S		32	15.79	...		20	33.8	...

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				h.	m.	s.		"	"	"	
151		Aug. 1	S	18	35	26.76	...	136	44	13.4	...
		" 16	S		35	26.62	...		44	13.5	...
152		Aug. 22	S	18	35	30.84	...	137	11	6.6	7.5
153	R. Scuti Var 1	Aug. 13	M	18	40	6.79	..	95	51	1.3	...
	... ..	" 14	M		40	6.73	...		51	0.5	...
154	7572 Lacaille	Aug. 22	S	18	42	11.14	5	136	45	9.1	...
155	7578 Lacaille	Aug. 16	S	18	42	44.45	4	136	44	45.1	...
156	10 Lyræ 8 Var 1	July 29	S	18	44	59.01	...	56	47	45.2	...
	... ..	Aug. 1	S		44	59.12	...		47	44.3	...
	... ..	" 2	S		44	59.15	...		47	43.7	...
	... ..	" 20	S		44	59.12	4		47	44.8	...
	... ..	" 23	S		44	59.06	...		47	43.3	...
157	13 Lyræ Var 2	Aug. 1	S	18	51	8.07	..	46	14	2.6	...
	... ..	" 2	S		51	7.97	...		14	3.1	...
	... ..	" 20	S		51	8.41	...		14	3.9	...
158	17 Aquilæ 3 ..	July 23	M	18	59	4.12	...	76	20	19.6	...
	... ..	Aug. 13	M		59	3.92	...		20	21.8	...
	... ..	" 14	M		59	4.04	...		20	21.1	...
	... ..	" 21	S		59	3.96	6		20	21.3	...
	... ..	" 23	S		59	3.96	...		20	19.4	...
159	41 Sagittarii *	Sep. 3	M	19	1	33.07	3	111	14	22.0	...
160	... ..	Aug. 23	S	19	8	9.62	6	129	49	15.9	9.0
161	... ..	Aug. 2	S	19	9	59.74	...	123	31	8.8	...
		" 13	M		9	59.72	...		31	9.6	...
		" 14	M		9	59.74	6		31	7.9	...
162	25 Aquilæ *	Aug. 16	S	19	11	20.11	...	78	39	3.3	...
		" 21	S		11	20.20	...		39	3.4	...

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				h.	m.	s.		°	'	"	
163	44 Sagittarii ρ^1 ...	Sep. 3	M	19	13	39.67	...	108	6	13.0	...
164		Aug. 23	S	19	16	26.20	...	129	53	0.4	7.5
165	30 Aquilæ δ ...	July 29	S	19	18	32.33	...	87	9	26.7	...
	... ..	Aug. 16	S		18	32.30	...		9	26.7	...
	... ..	" 22	S		18	32.36	...		9	26.8	...
166	... ..	Aug. 23	S	19	24	47.60	...	129	56	11.3	8.5
167	51 Sagittarii λ^1 ...	Sep. 5	M	19	27	38.72	...	115	1	4.1	...
168	52 Sagittarii λ^2 ...	Aug. 13	M	19	28	18.17	...	115	11	4.3	...
	... ..	" 14	M		28	18.27	...		11	4.9	...
	... ..	" 16	S		28	18.41	...		11	4.7	...
169	... ..	Aug. 22	S	19	34	15.31	...	127	17	18.3	...
170	50 Aquilæ γ ...	July 12	S	19	39	41.76	...	79	43	14.8	...
	... ..	Sep. 6	M		39	41.74	...		43	14.4	...
171	... ..	Aug. 2	S	19	43	56.67	...	122	19	35.3	...
	... ..	" 13	M		43	56.84	...		19	35.8	...
172	53 Aquilæ α ...	Aug. 20	S	19	44	3.06	5	81	29	36.0	...
	... ..	" 22	S		44	2.84	...		29	36.3	...
173	60 Aquilæ β ...	Aug. 21	S	19	48	31.99	...	83	56	7.5	...
	... ..	" 22	S		48	32.05	5		56	6.6	...
174	9208 Taylor ...	July 12	S	19	55	34.13	...	122	26	25.3	...
	... ..	" 28	S		55	34.13	...		26	24.9	...
	... ..	Aug. 1	S		55	34.04	...		26	25.0	...
175	5 Capricorni α^1 ...	Sep. 5	M	20	9	59.76	...	102	55	54.8	...
176	6 Capricorni α^2 ...	Aug. 1	S	20	10	23.73	...	102	58	11.6	...
		Sep. 3	M		10	23.63	...		58	11.1	...
		" 30	M		10	23.62	...		58	12.5	...

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				h	m.	s.		°	'	"	
177	39095 Lalande ...	Aug. 1	N	20	14	34.32	...	106	15	51.3	8.0
		" 16	S		14	34.03	...		15	50.0	...
		" 20	S		14	34.14	...		15	51.0	...
178	... ..	Aug. 23	S	20	16	43.30	4	121	12	10.2	8.5
179	11 Capricorni ρ ...	July 12	S	20	20	59.12	...	108	16	1.7	...
	... ..	Aug. 12	M		20	58.00	...		16	2.6	...
	... ..	Sep. 5	M		20	59.02	6		16	1.5	...
	... ..	" 30	M		20	59.02	...		16	2.0	...
180	... ..	Aug. 23	S	20	26	13.37	5	121	13	3.2	8.0
181	14 Capricorni γ^2 ..	Aug. 1	S	20	31	33.07	5	105	26	10.2	...
182	... ..	Aug. 23	S	20	35	48.56	6	123	58	55.6	8.0
183	50 Cygni α ...	Aug. 9	M	20	36	43.60	...	45	13	40.7	...
	... ..	" 12	M		36	43.60	...		12	41.6	...
	... ..	" 13	M		36	43.65	...		12	41.5	...
	... ..	" 14	M		36	43.41	...		12	41.9	...
	... ..	Sep. 3	M		36	43.57	5		13	42.0	...
184	... ..	Aug. 23	S	20	43	29.30	...	124	58	32.5	8.0
185	32 Vulpeculae ...	Aug. 12	M	20	48	40.74	...	62	27	57.2	...
	... ..	" 18	S		48	40.75	...		27	56.3	...
186	... ..	Aug. 23	S	20	51	28.75	...	126	38	27.0	8.0
187	23 Capricorni θ ...	Aug. 9	M	20	58	11.12	...	107	46	42.4	...
188	... ..	Aug. 23	S	20	59	34.54	...	129	1	55.3	8.5
189	13 Aquarii ν ...	July 12	S	21	2	4.37	...	101	55	42.9	...
	... ..	Aug. 20	S		2	4.49	...		55	42.2	...
		Oct. 3	S		2	4.36	...		55	41.8	...
190	64 Cygni 3 ...	Aug. 18	S	21	7	3.75	5	60	20	15.7	...
		Sep. 29	M		7	3.77	...		20	16.2	...
		" 30	M		7	3.80	...		20	16.3	...

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				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
190	64 Cygni 3 ...	Oct. 1	S	21	7	3.72	...	60	20	16.1	...
		" 4	S		7	3.64	...		20	14.4	...
191		Aug. 23	S	21	10	53.55	...	129	32	25.0	8.0
192	22 Aquarii β ...	Sep. 29	M	21	24	17.55	...	96	10	35.9	...
		" 30	M		24	17.36	...		10	37.1	...
		Oct. 1	S		24	17.61	...		10	36.3	...
		" 2	S		24	17.58	...		10	35.6	...
193	... ..	July 12	S	21	29	47.10	...	98	25	58.7	...
		Aug. 18	S		29	47.26	...		26	0.0	...
194	23 Aquarii γ ...	Aug. 14	M	21	30	23.90	5	98	28	17.0	...
		Sep. 5	M		30	24.26	...		28	15.3	...
195	8 Pegasi ϵ ...	Aug. 18	S	21	37	24.45	...	80	45	21.6	...
		Oct. 1	S		37	24.35	...		45	21.6	...
		" 3	S		37	24.49	...		45	22.1	...
		" 4	S		37	24.46	...		45	21.5	...
		" 6	S		37	24.39	...		45	20.5	...
196	49 Capricorni δ ...	Sep. 5	M	21	39	25.10	...	100	45	5.5	...
197	16 Pegasi ...	Sep. 22	S	21	46	47.15	...	64	43	23.4	...
		" 29	M		46	46.94	...		43	23.1	...
		Oct. 6	S		46	48.06	...		43	19.6	...
		" 11	S		46	47.23	...		43	22.0	...
		" 13	S		46	47.12	...		43	21.8	...
198	... ..	" 14	S		46	47.15	...		43	23.2	...
		Oct. 4	S	21	54	10.36	...	92	49	12.8	...
199	34 Aquarii α ...	Aug. 9	M	21	58	41.63	...	90	50	19.4	...
		Sep. 17	M		58	41.46	...		50	20.4	...
		" 24	M		58	41.57	...		50	20.6	...
		" 26	M		58	41.61	6		50	22.2	...
		" 27	M		58	41.68	...		50	20.9	...
		Oct. 7	S		58	41.55	...		50	18.8	...
		" 14	S		58	41.53	...		50	20.2	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1882.			Magnitude.
				h.	m.	s.		°	'	"	
200	43 Aquarii θ ...	Aug. 25	S	22	9	33.14	...	98	28	7.0	...
		Sep. 12	R		9	32.81	5		28	7.3	...
		Oct. 3	S		9	32.90	...		28	8.6	...
		" 17	R		9	32.94	...		28	10.3	...
		Nov. 14	M		9	32.95	...		28	7.5	...
201	55 Aquarii 3...	Nov. 1	M	22	21	43.40	...	90	43	28.4	...
202		Aug. 18	S	22	21	45.17	...	100	38	23.6	...
		" 25	S		21	44.88	...		38	23.2	...
203	150 R. P. L. ...	Sep. 6	R	22	23	45.81	5	4	35	18.1	...
		" 30	M		23	45.56	7		35	20.5	...
		Oct. 2	S		23	45.44	5		35	18.6	...
		" 7	S		23	45.19	5		35	17.4	...
		" 13	S		23	46.07	3		35	19.3	...
		" 15	S		23	45.54	3		35	20.4	...
		" 16	R		23	45.75	3		35	19.2	...
		Nov. 13	M		23	45.69	3		35	18.9	...
204	62 Aquarii η ...	Aug. 27	S	22	28	15.63	5	90	49	39.3	...
		Sep. 8	R		28	15.84	5		49	39.7	...
		" 17	M		28	15.84	...		49	40.3	...
		" 23	M		28	15.88	...		49	41.7	...
		" 24	M		28	15.87	...		49	40.5	...
		" 26	M		28	15.87	...		49	40.9	...
		" 27	M		28	15.86	...		49	42.0	...
		Oct. 3	S		28	15.81	...		49	39.8	...
		" 4	S		28	15.91	...		49	40.2	...
		" 17	R		28	15.83	...		49	40.5	...
		" 18	R		28	15.91	...		49	40.2	...
		" 21	R		28	15.87	...		49	40.6	...
		" 23	R		28	15.80	...		49	40.2	...
		Nov. 1	M		28	15.85	...		49	40.4	...
		" 14	M		28	15.87	...		49	40.1	...
		" 15	M		28	15.84	...		49	38.6	...
205	153 R. P. L. ...	Nov. 3	M	22	29	50.43	3	2	37	14.7	...
		" 4	M		29	50.33	3		37	13.8	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
205	153 R. P. L. ...	Nov. 5	M	22	29	50.40	3	2	37	15.4	...
	... ..	" 6	M		29	50.70	2		37	14.6	...
	... ..	" 11	M		29	50.96	3		37	14.1	...
206	42 Pegasi 3 ...	Aug. 25	S	22	34	34.76	...	79	53	15.8	...
	... ..	" 27	S		34	34.54	...		53	16.6	...
	... ..	Sep. 16	M		34	34.69	...		53	16.5	...
	... ..	" 27	M		34	34.75	...		53	17.7	...
	... ..	Oct. 7	S		34	34.90	...		53	15.0	...
	... ..	" 11	S		34	34.60	...		53	17.7	...
	... ..	" 13	S		34	34.84	5		53	16.8	...
	... ..	" 15	S		34	34.69	...		53	17.5	...
	... ..	" 16	R		34	34.75	...		53	17.6	...
	... ..	Nov. 15	M		34	34.77	...		53	15.0	...
207	XXII. 841 W. B. E ...	Oct. 17	E	22	40	28.04	...	87	40	19.8	7.5
208	24 Piscis Australis a.	Sep. 10	R	22	50	1.15	5	120	21	11.1	...
	... ..	" 16	M		50	0.29	...		21	9.5	...
	... ..	" 17	M		50	1.13	...		21	11.4	...
	... ..	" 23	M		50	1.00	...		21	10.8	...
	... ..	" 27	M		50	1.01	...		21	11.2	...
	... ..	Oct. 2	S		50	0.94	6		21	9.0	...
	... ..	" 15	S		50	0.94	...		21	9.3	...
	... ..	" 16	R		50	0.98	...		21	10.2	...
	... ..	" 18	R		50	1.02	...		21	10.4	...
	... ..	" 23	R		50	1.04	...		21	10.3	...
	... ..	" 24	R		50	1.03	...		21	9.7	...
	... ..	" 25	R		50	0.97	...		21	9.6	...
	... ..	Nov. 6	M		50	1.06	...		21	9.0	...
209	... ..	Sep. 24	M	22	51	44.47	...	85	27	8.7	...
210	4 Piscium β ...	Sep. 8	R	22	56	51.24	...	86	55	19.8	...
	... ..	Oct. 4	S		56	51.08	...		55	20.2	...
211	53 Pegasi β ...	Nov. 7	M	22	57	5.33	...	62	39	53.5	...
212	54 Pegasi α ...	Aug. 25	S	22	57	53.00	...	75	32	11.2	...
	... ..	" 26	S		57	53.29	...		32	10.6	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
212	64 Pegasi α ...	Aug. 27	S	22	57	53.41	...	75	32	11.4	...
		Sep. 22	S		57	53.34	...		32	14.0	...
		" 23	M		57	53.17	...		32	14.3	...
		" 26	M		57	53.28	...		32	13.4	...
		Oct. 2	S		57	53.20	...		32	11.6	...
		" 13	S		57	53.13	...		32	12.2	...
		" 14	S		57	53.26	6		32	12.9	...
		" 15	S		57	53.33	...		32	12.7	...
		" 16	R		57	53.26	...		32	12.2	...
		" 17	R		57	53.25	...		32	13.2	...
		" 18	R		57	53.26	...		32	12.9	...
		" 20	R		57	53.29	...		32	13.3	...
		" 24	R		57	53.23	6		32	12.4	...
		" 25	R		57	53.29	...		32	11.6	...
213	6 Piscium γ ...	Sep. 6	R	23	10	0.68	...	87	28	16.7	...
		" 8	R		10	0.67	4		28	15.4	...
		" 9	R		10	0.71	...		28	16.6	...
		" 18	M		10	0.64	...		28	15.7	...
		" 20	M		10	0.63	4		28	16.7	...
		" 24	M		10	0.68	...		28	16.6	...
		" 26	M		10	0.62	2		28	17.6	...
		" 27	M		10	0.63	...		28	17.3	...
		Oct. 7	S		10	0.59	...		28	14.8	...
		" 20	R		10	0.67	6		28	16.6	...
		" 28	R		10	0.68	...		28	15.2	...
		Nov. 1	M		10	0.69	...		28	15.8	...
		" 5	M		10	0.67	...		28	15.9	...
		" 11	M		10	0.66	...		28	15.6	...
		" 12	M		10	0.67	...		28	16.7	...
		" 13	M		10	0.70	...		28	16.9	...
		" 14	M		10	0.71	...		28	15.2	...
		" 15	M		10	0.68	...		28	15.5	...
214		Oct. 13	S	23	10	59.17	6	127	25	13.4	9.0
215		Oct. 6	S	23	11	30.98	...	129	58	31.4	8.0
216		Oct. 14	S	23	12	6.41	...	137	25	28.9	8.0

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	m.	s.		°	'	"	
217	8 Piscium κ ...	Sep. 5	M	23	19	51.54	...	89	29	58.8	...
		" 6	R		19	51.50	...		29	58.6	...
		" 16	M		19	51.51	...		29	58.6	...
		" 18	M		19	51.11	2		29	59.1	...
		Oct. 20	R		19	51.47	...		29	58.9	...
		" 25	R		19	51.50	...		29	58.2	...
		Nov. 1	M		19	51.46	...		29	58.6	...
		" 3	M		19	51.50	...		29	58.9	...
		" 5	M		19	51.42	...		29	58.8	...
		" 7	M		19	51.52	...		29	57.9	...
		" 14	M		19	51.39	...		29	58.8	...
		" 15	M		19	51.40	...		29	58.9	...
218	10 Piscium θ ...	Aug. 12	M	23	20	58.00	...	84	22	42.9	...
219	158 R. P. L. ...	Sep. 30	M	23	27	49.73	7	3	27	15.3	...
		Oct. 28	R		27	50.73	3		27	12.7	...
220	17 Piscium ι ...	Aug. 12	M	23	32	51.15	...	85	7	17.2	...
		Sep. 18	M		32	51.06	...		7	15.9	...
		Oct. 6	S		32	51.26	...		7	16.1	...
		" 27	R		32	51.07	...		7	16.7	...
		" 28	R		32	51.16	...		7	18.4	...
		Nov. 3	M		32	51.19	...		7	16.3	...
		" 4	M		32	51.15	...		7	16.4	...
		" 6	M		32	51.20	...		7	16.2	...
		" 7	M		32	51.21	...		7	15.7	...
		Dec. 1	M		32	51.15	...		7	17.1	...
221	9583 Lacaille	Nov. 5	M	23	38	43.90	5	128	44	33.2	8.0
222		Oct. 3	S	23	40	57.87	5	128	47	15.4	5.5
223	— Sculptoris δ	Sep. 6	R	23	41	43.03	...	118	53	25.3	...
		" 8	R		41	43.89	...		53	26.7	...
		Oct. 21	R		41	43.01	...		53	26.9	...
		" 23	R		41	43.92	...		53	25.8	...
		" 28	R		41	43.89	...		53	25.3	...
		Nov. 4	M		41	43.06	...		53	26.4	...
		" 7	M		41	43.89	...		53	26.0	...

Separate Results of Madras Meridian Circle Observations in 1862.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1862.			No. of Wires.	Mean Polar Distance. 1862.			Magnitude.
				h.	ms.	s.		°	'	"	
224		Oct. 27	R	23	41	51.93	...	142	5	4.4	8.5
225	R Cassiopeiæ Var. 3...	Oct. 28	R	23	51	24.51	...	39	22	49.6	6.6
		Nov. 5	M		51	24.88	...		22	48.0	6.0
226		Oct. 27	R	23	51	52.94	4	143	16	38.8	0.5
227	28 Piscium ω	Sep. 8	R	23	52	13.51	...	63	54	2.5	...
		" 9	R		52	13.58	5		54	3.6	...
		Oct. 8	S		52	13.56	...		54	0.4	...
		" 21	R		52	13.55	...		54	2.6	...
		Nov. 1	M		52	13.64	...		54	2.4	...
		" 3	M		52	13.56	...		54	1.9	..
		" 6	M		52	13.50	5		54	2.0	...
		" 11	M		52	13.56	...		54	1.4	...
		" 13	M		52	13.55	...		54	2.9	...

MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1862

REDUCED TO JANUARY 1. OF THAT YEAR.

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
1	21 Andromedæ α ...	2.0	...	0	1	15.53	61	40	19.5	4	0.71
2	47374 Lalande ...	7.0	...	0	2	51.10	93	19	45.5	4	0.81
3	88 Pegasi γ ...	2.7	...	0	6	7.92	75	35	2.1	2	0.81
4	48 Taylor ...	6.5	...	0	10	42.52	89	4	43.7	18	0.74
5	41 Piscium δ ...	6.0	...	0	13	29.88	82	34	34.3	5	0.73
6	44 Piscium ...	6.0	...	0	18	19.73	88	40	29.2	11	0.77
7	12 Ceti ...	5.7	...	0	22	59.76	94	43	13.7	5	0.82
8	670 Lalande ...	7.0	2	0	23	3.04	85	54	13.7	12	0.75
9	... ..	9.0	3	0	28	47.55	89	8	14.0	3	0.87
10	15 Ceti ...	7.5	...	0	31	1.16	91	15	47.0	4	0.75
11	1097 Lalande ...	8.0	4	0	34	29.73	89	0	35.8	4	0.87
12	1123 Lalande ...	8.5	1	0	35	35.78	89	3	40.8	2	0.89
13	16 Ceti β ...	2.0	...	0	36	39.58	108	44	40.5	5	0.77
14	1108 Lalande ...	8.5	1	0	38	0.50	88	56	56.2	1	0.85
15	60 Piscium ...	6.5	...	0	40	15.45	84	0	46.7	4	0.75
16	235 Taylor ...	6.5	...	0	41	8.82	85	25	47.2	4	0.82
17	63 Piscium δ ...	4.9	...	0	41	31.47	83	10	0.2	11	0.73
18	... ..	9.2	3	0	41	33.04	89	7	14.5	3	0.85
19	20 Ceti ...	5.3	...	0	45	57.21	91	53	40.5	14	0.74
20	0.806 W. B. E. ...	10.0	2	0	46	33.72	88	50	25.2	3	0.83
21	2 Ursæ Minoris ...	4.4	...	0	50	30.17	4	29	9.4	1	0.60
22	1638 Lalande ...	7.6	3	0	50	34.26	88	57	43.7	3	0.81
23	1639 Lalande ...	8.5	2	0	50	36.18	88	20	12.9	3	0.86
24	1784 Lalande ...	8.0	2	0	54	52.79	88	13	7.7	3	0.86
25	71 Piscium ϵ ...	4.6	...	0	55	47.00	82	51	13.0	4	0.72
26	26 Ceti ...	6.0	...	0	56	42.92	89	22	26.3	16	0.75
27	1879 Lalande ...	7.6	3	0	57	37.76	88	25	33.9	3	0.84
28	0.1031 W. B. E. ...	9.0	3	0	59	1.78	88	6	37.7	3	0.89
29	29 Ceti ...	7.0	1	1	0	52.74	88	43	46.6	2	0.92
30	80 Piscium ϵ ...	5.8	...	1	1	15.77	85	4	52.6	17	0.72
31	1.15 W. B. E. ...	9.0	1	1	2	53.51	87	20	17.6	1	0.86
32	2089 Lalande ...	8.4	3	1	3	21.21	88	10	53.2	3	0.85
33	83 Ceti ...	6.3	...	1	3	27.56	88	17	23.6	3	0.84
34	1.101 W. B. E. ...	9.0	3	1	7	39.67	87	54	30.7	3	0.86
35	... ..	10.0	2	1	9	9.95	87	42	42.8	3	0.86

1.—Alpherat 2.—Algenib
 9, 11, 12, 14, 18, 20, 22, 23, 24, 27, 28, 31, 32, 33, 34, 35. Comparison Stars used with Mars in opposition,
 for investigation of the Constant of Solar Parallax.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
1	21 Andromedæ α ...	+ 3.0760	+ 0.0182	+ 0.009	- 20.056	+ 0.013	+ 0.15	4
2	47374 Lalande ...	+ 3.0711	+ 0.0004	...	- 20.053	+ 0.015	...	..
3	88 Pegasi γ ...	+ 3.0311	+ 0.0100	0.000	- 20.049	+ 0.022	+ 0.02	20
4	48 Taylor ...	+ 3.0730	+ 0.0030	...	- 20.034	+ 0.030	...	67
5	41 Piscium δ ...	+ 3.0823	+ 0.0066	- 0.002	- 20.020	+ 0.036	- 0.01	66
6	44 Piscium ...	+ 3.0743	+ 0.0035	- 0.002	- 19.991	+ 0.045	+ 0.02	87
7	12 Ceti ...	+ 3.0609	+ 0.0008	- 0.002	- 19.955	+ 0.055	+ 0.01	112
8	670 Lalande ...	+ 3.0816	+ 0.0054	...	- 19.954	+ 0.054	...	113
9	... ..	+ 3.0746	+ 0.0039	...	- 19.897	+ 0.065	...	..
10	15 Ceti ...	+ 3.0681	+ 0.0029	...	- 19.872	+ 0.069	...	163
11	1097 Lalande ...	+ 3.0755	+ 0.0043	...	- 19.823	+ 0.076	...	..
12	1123 Lalande ...	+ 3.0755	+ 0.0044	...	- 19.814	+ 0.079	...	..
13	16 Ceti β ...	+ 2.9997	- 0.0055	+ 0.013	- 19.799	+ 0.080	- 0.02	196
14	1198 Lalande ...	+ 3.0761	+ 0.0045	...	- 19.779	+ 0.083	...	..
15	60 Piscium ...	+ 3.0866	+ 0.0063	...	- 19.740	+ 0.087	...	216
16	235 Taylor ...	+ 3.0912	+ 0.0066	...	- 19.733	+ 0.089	...	..
17	63 Piscium ε ...	+ 3.1009	+ 0.0079	+ 0.003	- 19.727	+ 0.090	+ 0.05	222
18	... ..	+ 3.0758	+ 0.0047	...	- 19.727	+ 0.089	...	..
19	20 Ceti ...	+ 3.0633	+ 0.0034	- 0.004	- 19.653	+ 0.097	+ 0.01	242
20	0.806 W. B. E. ...	+ 3.0775	+ 0.0061	...	- 19.643	+ 0.099	...	..
21	2 Ursa Minoris ...	+ 6.7971	+ 1.2750	+ 0.035	- 19.570	+ 0.225	+ 0.01	262
22	1638 Lalande ...	+ 3.0773	+ 0.0052	...	- 19.560	+ 0.107	...	..
23	1639 Lalande ...	+ 3.0789	+ 0.0054	...	- 19.563	+ 0.107	...	..
24	1784 Lalande ...	+ 3.0819	+ 0.0058	...	- 19.482	+ 0.115	...	..
25	71 Piscium ε ...	+ 3.1124	+ 0.0087	- 0.002	- 19.464	+ 0.119	0.00	258
26	26 Ceti ...	+ 3.0757	+ 0.0058	...	- 19.444	+ 0.118	...	295
27	1579 Lalande ...	+ 3.0812	+ 0.0058	...	- 19.424	+ 0.120	...	..
28	0.1031 W. B. E. ...	+ 3.0833	+ 0.0061	...	- 19.394	+ 0.123	...	..
29	29 Ceti ...	+ 3.0799	+ 0.0058	...	- 19.352	+ 0.126	...	324
30	80 Piscium ε ...	+ 3.1025	+ 0.0077	- 0.021	- 19.343	+ 0.128	+ 0.19	325
31	1.15 W. B. E. ...	+ 3.0869	+ 0.0065	...	- 19.304	+ 0.130	...	..
32	2089 Lalande ...	+ 3.0836	+ 0.0062	...	- 19.294	+ 0.131	...	..
33	33 Ceti ...	+ 3.0830	+ 0.0062	- 0.003	- 19.292	+ 0.131	+ 0.02	344
34	1.101 W. B. E. ...	+ 3.0862	+ 0.0066	...	- 19.187	+ 0.139	...	..
35	... ..	+ 3.0879	+ 0.0068	...	- 19.140	+ 0.142	...	..

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
36	89 Piscium <i>f</i>	6.0	...	1	10	40.96	87	6	47.5	13	0.77
37	43 Ceti	6.5	...	1	15	31.44	91	10	21.1	8	0.77
38	45 Ceti <i>θ</i>	4.6	...	1	17	7.49	98	53	47.6	4	0.86
39	93 Piscium <i>p</i>	5.0	...	1	18	49.25	71	32	49.3	1	0.77
40	465 Taylor	7.0	1	1	19	23.64	91	7	2.9	3	0.84
41	98 Piscium <i>μ</i>	5.0	...	1	22	57.40	84	34	7.6	7	0.69
42	99 Piscium <i>η</i>	4.7	...	1	24	6.16	75	22	0.7	7	0.79
43	514 Taylor	6.0	2	1	28	27.04	73	16	27.3	2	0.92
44	106 Piscium <i>v</i>	4.6	...	1	34	15.12	85	12	43.7	22	0.73
45	590 Taylor	7.0	...	1	41	17.19	87	0	19.3	4	0.70
46	111 Piscium <i>l</i>	5.5	...	1	46	24.71	87	29	43.4	5	0.70
47	6 Arietis <i>β</i>	2.9	...	1	47	1.30	69	52	6.3	16	0.80
48	13 Arietis <i>α</i>	2.0	...	1	59	23.95	67	11	31.7	11	0.84
49	21 Arietis	6.7	2	2	7	53.29	65	35	55.3	3	0.90
50	67 Ceti	6.1	...	2	10	6.01	97	3	36.0	6	0.89
51	22 Arietis <i>θ</i>	5.9	...	2	10	27.15	70	44	20.3	1	0.77
52	68 Ceti <i>α</i> Var. 1	5.7	2	2	12	22.52	93	36	22.1	3	0.83
53	73 Ceti <i>l</i> ^o	4.4	...	2	20	40.52	82	9	35.1	6	0.89
54	26 R. P. L.	8.0	...	2	21	57.39	3	33	29.5	3	0.86
55	31 Arietis	5.5	...	2	29	6.59	78	9	11.1	2	0.92
56	32 Arietis <i>v</i>	6.0	...	2	30	59.20	68	39	16.1	1	0.69
57	86 Ceti <i>γ</i>	4.0	...	2	36	9.11	87	20	52.4	4	0.91
58	42 Arietis <i>v</i>	5.7	...	2	41	35.86	73	6	45.1	1	0.69
59	48 Arietis <i>α</i>	5.3	...	2	51	19.59	69	12	50.5	2	0.81
60	92 Ceti <i>α</i>	2.3	...	2	55	4.01	86	27	14.0	2	0.88
61	33 R. P. L.	5.7	...	3	0	16.90	5	35	17.2	2	0.92
62	57 Arietis <i>β</i>	4.1	...	3	3	44.61	70	47	53.6	2	0.85
63	58 Arietis <i>β</i>	5.3	...	3	6	58.39	69	28	11.3	2	0.92
64	... ..	8.0	1	3	12	18.91	130	54	40.2	1	0.91
65	33 Persei <i>α</i>	2.6	...	3	14	29.21	40	38	1.7	1	0.94
66	17 Tauri	4.0	...	3	36	41.23	61	19	23.2	2	0.85
67	... ..	8.0	1	3	38	1.98	136	13	17.3	1	0.91
68	25 Tauri <i>γ</i>	3.7	...	3	39	17.10	66	19	29.5	3	0.92
69	34 Eridani <i>γ</i> ¹	3.5	...	3	51	35.48	108	54	11.5	3	0.92
70	... ..	10.0	1	3	53	0.15	128	25	47.3	1	0.19

52—Mira Ceti Var. 1.—Period 331 days.—Range 2nd to 10th magnitude.

60—Electra

68—Aleyone.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
36	89 Piscium f...	+ 3.0324	+ 0.0072	- 0.005	- 19.109	+ 0.146	+ 0.02	388
37	43 Ceti ...	+ 3.0632	+ 0.0053	...	- 19.076	+ 0.153	...	406
38	45 Ceti θ ...	+ 3.0029	+ 0.0018	- 0.007	- 18.931	+ 0.154	+ 0.22	420
39	93 Piscium p...	+ 3.2206	+ 0.0163	...	- 18.912	+ 0.165	...	427
40	405 Taylor ...	+ 3.0810	+ 0.0056	...	- 18.864	+ 0.161	...	433
41	98 Piscium μ ...	+ 3.1171	+ 0.0089	+ 0.019	- 18.735	+ 0.169	+ 0.18	448
42	99 Piscium η ...	+ 3.1973	+ 0.0142	0.000	- 18.720	+ 0.176	0.00	453
43	514 Taylor ...	+ 3.2235	+ 0.0154	...	- 18.580	+ 0.185	...	477
44	106 Piscium ν ...	+ 3.1167	+ 0.0091	- 0.004	- 18.383	+ 0.191	+ 0.04	518
45	590 Taylor ...	+ 3.1020	+ 0.0083	...	- 18.128	+ 0.202	...	551
46	111 Piscium I ...	+ 3.0983	+ 0.0083	- 0.002	- 17.931	+ 0.210	+ 0.08	574
47	6 Arietis β ...	+ 3.2926	+ 0.0183	+ 0.002	- 17.908	+ 0.226	+ 0.11	577
48	13 Arietis α ...	+ 3.3518	+ 0.0203	+ 0.012	- 17.395	+ 0.252	+ 0.15	648
49	21 Arietis ...	+ 3.3932	+ 0.0215	...	- 17.013	+ 0.269	...	693
50	67 Ceti ...	+ 2.9829	+ 0.0049	+ 0.003	- 16.909	+ 0.242	+ 0.14	704
51	22 Arietis θ ...	+ 3.3222	+ 0.0179	- 0.002	- 16.940	+ 0.260	+ 0.01	707
52	68 Ceti α Var. 1 ...	+ 3.0260	+ 0.0064	- 0.003	- 16.801	+ 0.248	+ 0.23	720
53	73 Ceti 1 ^a ...	+ 3.1784	+ 0.0117	+ 0.001	- 16.387	+ 0.276	+ 0.02	760
54	26 R. P. L. ...	+ 15.5553	+ 3.5726	...	- 16.329	+ 1.324	...	...
55	31 Arietis ...	+ 3.2419	+ 0.0137	...	- 15.958	+ 0.294	...	798
56	32 Arietis ν ...	+ 3.3922	+ 0.0183	- 0.002	- 15.858	+ 0.310	+ 0.02	808
57	86 Ceti γ ...	+ 3.1110	+ 0.0094	- 0.011	- 15.578	+ 0.294	+ 0.19	837
58	42 Arietis η ...	+ 3.3351	+ 0.0163	- 0.002	- 15.273	+ 0.322	- 0.02	870
59	48 Arietis α ...	+ 3.4170	+ 0.0155	- 0.001	- 14.711	+ 0.343	+ 0.02	921
60	92 Ceti α ...	+ 3.1292	+ 0.0095	- 0.002	- 14.483	+ 0.323	+ 0.11	949
61	33 R. P. L. ...	+ 12.7464	+ 1.5782	0.000	- 14.164	+ 1.322	+ 0.08	960
62	57 Arietis β ...	+ 3.4666	+ 0.0171	+ 0.010	- 13.948	+ 0.364	+ 0.00	986
63	58 Arietis γ ...	+ 3.4382	+ 0.0176	- 0.006	- 13.680	+ 0.373	+ 0.07	999
64	... ..	+ 2.2080	+ 0.0011	...	- 13.308	+ 0.246	...	...
65	38 Persæ α ...	+ 4.2410	+ 0.0483	+ 0.002	- 13.258	+ 0.473	+ 0.05	1043
66	17 Tauri ...	+ 3.5174	+ 0.0180	0.000	- 11.740	+ 0.424	+ 0.04	1147
67	... ..	+ 1.8360	+ 0.0044	...	- 11.640	+ 0.233	...	...
68	25 Tauri η ...	+ 3.5511	+ 0.0177	- 0.001	- 11.553	+ 0.430	+ 0.06	1166
69	34 Eridani γ ¹ ...	+ 2.7916	+ 0.0047	+ 0.002	- 10.657	+ 0.350	+ 0.12	1234
70	... ..	+ 2.1698	+ 0.0030	...	- 10.563	+ 0.274	...	...

52. Proper motion adopted from the "British Association Catalogue."

53. Proper motion deduced from the "Nautical Almanac for 1902."

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
71	35 Tauri λ Var. 1	4.5	...	3	53	2.16	77	54	10.5	1	0.90
72	37 Tauri λ^1	4.7	...	3	56	32.47	68	17	55.7	2	0.92
73	... ..	9.0	1	4	3	39.47	146	56	47.4	1	0.91
74	74 Tauri ϵ ...	3.7	...	4	20	33.75	71	7	45.3	4	0.89
75	87 Tauri α ...	1.0	...	4	28	0.29	73	46	18.5	1	0.93
76	3 Aurigæ α ...	4.0	...	4	48	0.67	57	3	24.5	2	0.94
77	109 Tauri κ ...	6.0	1	5	10	59.17	68	3	0.4	1	0.93
78	112 Tauri β ...	2.0	...	5	17	34.20	61	30	49.0	2	0.89
79	40 R. P. L. ...	6.2	...	5	18	8.42	4	53	10.3	1	0.93
80	123 Tauri 3 ...	4.0	...	5	29	23.99	68	56	43.2	1	0.85
81	... ..	9.5	...	5	49	21.27	63	50	15.0	1	0.93
82	43 R. P. L. ...	6.6	...	5	51	7.35	3	14	23.0	1	0.94
83	13 Geminorum μ ...	3.4	...	6	14	36.60	67	25	9.7	1	0.94
84	24 Geminorum γ ...	2.6	...	6	29	44.37	73	29	12.6	2	0.94
85	68 Geminorum ...	5.4	...	7	25	43.71	73	52	50.3	1	0.94
86	81 Geminorum g ...	4.9	...	7	38	7.86	71	9	24.2	2	0.94
87	70 R. P. L. ...	6.5	...	9	45	55.84	5	25	14.4	1	0.76
88	72 R. P. L. ...	5.9	...	10	9	0.70	3	3	2.7	10	0.80
89	79 R. P. L. ...	7.7	...	10	54	55.00	1	36	45.1	1	0.82
90	89 R. P. L. ...	6.3	...	11	57	44.99	3	38	53.0	3	0.82
91	2 Corvi ϵ ...	3.0	...	12	3	1.82	111	51	8.3	3	0.42
92	92 R. P. L. ...	6.7	...	12	12	50.01	2	47	49.5	1	0.87
93	93 R. P. L. ...	6.5	...	12	14	20.34	1	32	7.8	1	0.84
94	21 Virginis q ...	6.0	...	12	26	39.49	98	41	26.0	1	0.43
95	9 Corvi β ...	2.3	...	12	27	5.56	112	38	0.6	3	0.42
96	67 Virginis α ...	1.0	...	13	17	55.63	100	26	25.8	2	0.42
97	103 R. P. L. ...	7.3	...	13	20	20.74	4	31	28.7	1	0.85
98	79 Virginis 3 ...	4.1	...	13	27	39.81	89	53	22.6	2	0.43
99	85 Ursæ Majoris η ...	2.3	...	13	42	6.02	39	58	49.7	1	0.44
100	8 Bootis η ...	3.0	...	13	48	6.75	70	54	33.0	2	0.43
101	93 Virginis τ ...	4.3	...	13	54	37.51	87	47	10.4	1	0.45
102	108 R. P. L. ...	7.3	...	14	4	11.79	3	31	54.2	1	0.43
103	16 Bootis α ...	1.0	...	14	9	22.03	70	3	51.8	4	0.45
104	100 Virginis λ ...	5.3	...	14	11	38.72	102	44	2.4	1	0.44
105	25 Bootis ρ ...	4.0	...	14	25	52.89	59	1	17.7	5	0.43

71.—A Tauri Var. 1.—Period, 3.95 days.—Range, 3.4 to 4.3 magnitude.

75.—Aldebaran 96.—Spica 103.—Arcturus.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
71	35 Tauri λ Var. 1 ...	+ 3.3158	+ 0.0115	...	- 10.550	+ 0.416	...	1241
72	37 Tauri λ^1 ...	+ 3.5298	+ 0.0153	+ 0.004	- 10.288	+ 0.446	+ 0.09	1257
73	... ..	+ 1.2763	+ 0.0290	...	- 9.719	+ 0.167	...	...
74	74 Tauri ϵ ...	+ 3.4866	+ 0.0120	+ 0.005	- 8.432	+ 0.468	+ 0.03	1376
75	87 Tauri α ...	+ 3.4302	+ 0.0097	+ 0.004	- 7.836	+ 0.464	+ 0.17	1420
76	3 Aurigæ ι ...	+ 3.8059	+ 0.0144	- 0.003	- 6.197	+ 0.544	+ 0.02	1520
77	109 Tauri ω ...	+ 3.5986	+ 0.0078	+ 0.001	- 4.255	+ 0.409	- 0.08	1637
78	112 Tauri β ...	+ 3.7851	+ 0.0082	+ 0.003	- 3.693	+ 0.545	+ 0.20	1681
79	40 H. P. L. ...	+ 18.4530	+ 0.6965	...	- 3.613	+ 2.649	...	1662
80	123 Tauri 3 ...	+ 3.5822	+ 0.0055	0.000	- 2.671	+ 0.519	+ 0.05	1767
81	... ..	+ 3.7283	+ 0.0031	...	- 0.030	+ 0.543	...	...
82	43 R. P. L. ...	+ 26.6742	+ 0.3267	...	- 0.777	+ 3.888	...	1879
83	13 Geminorum μ ...	+ 3.6268	- 0.0003	+ 0.005	+ 1.279	+ 0.527	+ 0.14	2047
84	24 Geminorum γ ...	+ 3.4650	- 0.0015	+ 0.001	+ 2.595	+ 0.500	+ 0.04	2163
85	68 Geminorum ...	+ 3.4317	- 0.0066	- 0.004	+ 7.329	+ 0.463	0.00	2456
86	51 Geminorum η ...	+ 3.4672	- 0.0066	- 0.008	+ 8.323	+ 0.459	+ 0.05	2558
87	70 R. P. L. ...	+ 10.8618	+ 1.5994	...	+ 16.720	+ 0.867	...	...
88	72 R. P. L. ...	+ 10.1146	- 1.6770	- 0.079	+ 17.749	+ 0.677	+ 0.06	3495
89	79 R. P. L. ...	+ 16.3943	- 9.8553	...	+ 19.251	+ 0.662	...	...
90	89 R. P. L. ...	+ 3.2779	- 0.5296	...	+ 20.055	- 0.004	...	4070
91	2 Corvi ϵ ...	+ 3.0791	+ 0.0142	- 0.005	+ 20.054	- 0.016	- 0.01	4097
92	92 R. P. L. ...	+ 1.5426	+ 0.0007	+ 0.415	+ 20.024	- 0.022	+ 0.08	4150
93	93 R. P. L. ...	- 0.0472	+ 1.1509	- 0.152	+ 20.016	- 0.009	- 0.07	4165
94	21 Virginia η ...	+ 3.0958	+ 0.0080	- 0.009	+ 19.920	- 0.002	0.00	4230
95	9 Corvi β ...	+ 3.1379	+ 0.0165	- 0.008	+ 19.915	- 0.064	+ 0.07	4234
96	67 Virginia α ...	+ 3.1543	+ 0.0100	- 0.005	+ 18.908	- 0.163	+ 0.04	4490
97	108 R. P. L. ...	- 2.7310	+ 0.9934	...	+ 18.836	+ 0.129	...	4498
98	79 Virginia 3 ...	+ 3.0710	+ 0.0064	- 0.019	+ 18.906	- 0.176	- 0.06	4532
99	85 Urs. Maj. η ...	+ 2.3852	- 0.0103	- 0.012	+ 18.998	- 0.159	+ 0.03	4607
100	8 Bootis η ...	+ 2.8617	- 0.0006	- 0.004	+ 17.866	- 0.199	+ 0.26	4645
101	93 Virginia τ ...	+ 3.0472	+ 0.0064	+ 0.001	+ 17.599	- 0.222	+ 0.07	4672
102	108 R. P. L. ...	- 7.9449	+ 2.5361	...	+ 17.182	+ 0.591	...	...
103	16 Bootis α ...	+ 2.8130	+ 0.0004	- 0.079	+ 16.944	- 0.227	+ 1.93	4729
104	100 Virginia λ ...	+ 3.2962	+ 0.0140	- 0.002	+ 16.836	- 0.264	- 0.02	4743
105	25 Bootis ρ ...	+ 2.5944	- 0.0015	- 0.008	+ 16.127	- 0.233	- 0.14	4808

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
106	5 Libræ	6.2	...	14	38	21.39	104	52	32.9	1	0.44
107	36 Bootis ε	2.3	...	14	38	57.60	62	20	33.2	3	0.44
108	9 Libræ α ¹	3.7	...	14	43	14.77	106	27	57.9	2	0.42
109	7 Ursæ Minoris β ...	2.8	...	14	51	8.66	15	16	51.0	2	0.49
110	43 Bootis ψ	5.0	...	14	58	32.03	62	30	46.3	3	0.42
111	24 Libræ ε	5.3	...	15	4	21.52	109	16	1.6	2	0.44
112	111 R. P. L.	6.9	...	15	5	58.11	5	31	0.0	2	0.44
113	27 Libræ β	2.0	...	15	9	34.88	98	52	17.1	3	0.45
114	32 Libræ γ ¹	5.7	...	15	20	28.65	106	13	57.4	2	0.41
115	114 R. P. L.	6.9	...	15	23	16.62	2	14	37.9	1	0.02
116	5 Coronæ Borealis α ...	2.0	...	15	28	50.78	62	49	8.3	6	0.45
117	24 Serpentis α	2.3	...	15	37	28.25	83	8	16.4	2	0.46
118	115 R. P. L.	6.9	...	15	49	0.87	4	43	35.0	1	0.43
119	16 Ursæ Minoris γ ...	4.0	...	15	49	4.15	11	46	58.0	1	0.55
120	7 Scorpil	4.0	...	15	52	10.41	112	13	32.7	1	0.52
121	8 Scorpil β ¹	3.0	...	15	57	25.00	109	25	29.2	13	0.51
122	1 Ophiuchi δ	3.0	...	16	7	6.90	93	20	15.0	1	0.44
123	21 Scorpil α	1.3	...	16	20	57.00	116	7	29.7	8	0.52
124	5 Ophiuchi Var. 3	...	...	16	26	18.98	106	52	3.1	1	0.58
125	40 Herculis γ	2.7	...	16	36	5.06	58	8	44.0	9	0.55
126	27 Ophiuchi α	3.7	...	16	51	8.24	80	21	27.6	9	0.55
127	22 Ursæ Minoris ε ...	4.1	...	17	0	14.52	7	44	31.3	2	0.94
128	R Ophiuchi Var. 2	...	...	16	59	50.59	105	51	20.1	3	0.58
129	64 Herculis α Var. 1 ...	3.0	...	17	8	21.31	75	26	56.6	5	0.55
130	42 Ophiuchi θ	5.6	...	17	13	32.07	114	51	29.0	4	0.53
131	45 Ophiuchi d	5.0	...	17	18	32.65	119	44	17.1	2	0.55
132	55 Ophiuchi α	2.0	...	17	28	31.73	77	20	12.9	8	0.55
133	— Scorpil α	2.3	...	17	32	50.53	128	57	16.5	3	0.57
134	... ..	8.5	...	17	37	31.78	126	29	14.8	2	0.59
135	... ..	8.0	...	17	39	35.46	127	14	31.4	1	0.58
136	86 Herculis μ	3.3	...	17	41	3.46	62	11	47.5	3	0.53
137	5282 Taylor	7.0	1	17	47	59.40	131	41	31.9	2	0.57
138	7499 Lacaille	7.0	...	17	48	6.97	129	4	38.1	1	0.58
139	7591 Lacaille	7.0	...	17	48	23.08	129	6	46.3	2	0.57
140	33 Draconis γ	2.3	...	17	53	24.35	38	29	38.2	1	0.47

107.—Mirc 116.—Alpha 123.—Antares.

124.—8 Ophiuchi Var. 3.—Period, 234 days.—Range, 9th. magnitude to invisibility.

127.—R Ophiuchi Var. 2.—Period, 302 days.—Range, 7.5 magnitude to invisibility.

129.—α Herculis Var. 1.—supposed to vary irregularly between 3rd. and 4th. magnitudes.

134, 135, 139. Comparison stars for Donati's comet of 1858.

Observed with the Madras Meridian Circle in that Year.

Number.	Star	In Right Ascension.			In Polar Distance			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
106	5 Librae ...	+ 3.2977	+ 0.0152	- 0.003	+ 15.456	- 0.314	+ 0.01	4928
107	36 Bootis e ...	+ 2.6240	- 0.0001	- 0.005	+ 15.422	- 0.252	- 0.01	4976
108	9 Librae a' ...	+ 3.3137	+ 0.0154	- 0.007	+ 15.179	- 0.324	+ 0.06	4895
109	7 Urs. Min. β ...	- 0.2520	+ 0.1022	- 0.005	+ 14.719	+ 0.019	+ 0.03	4986
110	43 Bootis φ ...	+ 2.5880	+ 0.0010	- 0.013	+ 14.267	- 0.232	0.00	4960
111	24 Librae	+ 3.4087	+ 0.0171	- 0.002	+ 13.909	- 0.364	+ 0.04	4995
112	111 R. P. L. ...	- 6.9685	+ 1.1915	...	+ 13.807	+ 0.731	...	5022
113	27 Librae β ...	- 3.2256	+ 0.0117	- 0.009	+ 13.576	- 0.353	+ 0.01	5031
114	32 Librae γ ...	- 3.3707	+ 0.0148	...	+ 12.853	- 0.384	...	5080
115	114 R. P. L. ...	- 23.3779	+ 7.8320	...	+ 12.671	+ 2.638	...	5140
116	5 Coronae Bor. a ...	+ 2.5294	+ 0.0023	+ 0.009	+ 12.280	- 0.297	+ 0.07	5143
117	24 Serpentis a ...	+ 2.9412	+ 0.0062	+ 0.009	+ 11.683	- 0.354	- 0.06	5196
118	115 R. P. L. ...	- 8.1427	+ 1.0281	...	+ 10.848	+ 0.991	...	...
119	16 Urs. Min. γ ...	- 2.3195	+ 0.2031	- 0.005	+ 10.845	+ 0.276	+ 0.08	5285
120	7 Scorpii δ ...	+ 3.5356	+ 0.0159	- 0.001	+ 10.614	- 0.443	- 0.01	5303
121	8 Scorpii β ¹ ...	+ 3.4776	+ 0.0142	- 0.002	+ 10.223	- 0.441	+ 0.02	5329
122	1 Ophiuchi δ ...	+ 3.1406	+ 0.0081	- 0.006	+ 9.483	- 0.408	+ 0.13	5414
123	21 Scorpii a ...	+ 3.6672	+ 0.0150	- 0.001	+ 8.400	- 0.401	+ 0.03	5498
124	8 Ophiuchi Var. 3 ...	+ 3.4139	+ 0.0109	...	+ 7.972	- 0.464	...	...
125	40 Hercules γ ...	+ 2.2662	+ 0.0033	- 0.034	+ 7.187	- 0.316	- 0.45	5604
126	27 Ophiuchi α ...	+ 2.8561	+ 0.0043	- 0.022	+ 5.936	- 0.401	- 0.02	5708
127	11 Ophiuchi Var. 2 ...	+ 3.4400	+ 0.0077	...	+ 5.204	- 0.487	...	...
128	22 Urs. Min. e ...	- 6.4307	+ 0.3030	+ 0.009	+ 5.170	+ 0.204	- 0.01	5780
129	64 Hercules a Var. 1 ...	+ 2.7336	+ 0.0035	- 0.003	+ 4.481	- 0.391	- 0.04	5871
130	42 Ophiuchi θ ...	+ 3.6787	+ 0.0080	- 0.003	+ 4.038	- 0.528	- 0.02	5851
131	45 Ophiuchi d ...	+ 3.8224	+ 0.0094	...	+ 3.675	- 0.551	+ 0.18	5881
132	55 Ophiuchi a ...	+ 2.7774	+ 0.0030	+ 0.004	+ 2.745	- 0.402	+ 0.20	5911
133	— Scorpii α ...	+ 4.1454	+ 0.0079	0.000	+ 2.362	- 0.601	+ 0.01	5970
134	... ..	+ 4.1684	+ 0.0068	...	+ 1.963	- 0.605	...	...
135	... ..	+ 4.0844	+ 0.0060	...	+ 1.785	- 0.594	...	...
136	86 Hercules μ ...	+ 2.3694	+ 0.0025	- 0.026	+ 1.656	- 0.345	+ 0.74	6021
137	8282 Taylor ...	+ 4.2604	+ 0.0046	...	+ 1.051	- 0.621	...	6061
138	7499 Lacaille ..	+ 4.1561	+ 0.0042	...	+ 1.040	- 0.605	...	...
139	7501 Lacaille... ..	+ 4.1577	+ 0.0042	...	+ 1.015	- 0.606	...	...
140	33 Draconis γ ...	+ 1.3914	+ 0.0030	0.000	+ 0.577	- 0.209	+ 0.04	6091

119.—The Proper Motion in R. A. deduced from the "Nautical Almanac for 1862."

120.—The Proper Motions deduced from the "Nautical Almanac for 1862."

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations.	Right Ascension.			Polar Distance.			Observations.	Fraction of Year.
				<i>h</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
141	— Sagittarii γ^1 ...	4.3	...	17	56	12.29	119	34	55.1	1	0.50
142	8355 Taylor ...	5.7	...	17	56	51.17	133	25	38.2	2	0.56
143	... ..	9.0	1	18	1	5.18	131	43	35.8	2	0.60
144	13 Sagittarii μ ...	4.7	...	18	5	30.59	111	5	27.2	1	0.67
145	7622 Lacai ...	7.0	...	18	5	53.33	133	12	18.2	1	0.62
146	7644 Lacaille ...	6.5	...	18	8	49.12	132	20	3.0	1	0.54
147	8461 Taylor ...	6.0	...	18	14	16.50	134	9	26.8	1	0.62
148	22 Sagittarii λ ...	4.1	...	18	19	27.12	115	29	37.1	1	0.67
149	... ..	9.0	...	18	22	42.21	135	15	52.6	1	0.62
150	3 Lyræ α ...	1.0	...	18	32	15.74	61	20	33.6	2	0.64
151	... ..	7.5	...	18	35	26.09	136	44	13.5	2	0.60
152	... ..	7.5	1	18	35	39.84	137	11	6.6	1	0.64
153	R Scuti Var. 1 ...	4.4	...	18	40	6.76	95	51	0.9	2	0.62
154	7872 Lacaille ...	6.0	...	18	42	11.14	136	45	9.1	1	0.64
155	7878 Lacaille ...	7.0	...	18	42	44.45	136	44	45.1	1	0.62
156	10 Lyræ β Var. 1 ...	3.9	...	18	44	59.09	56	47	44.3	5	0.60
157	13 Lyræ Var. 2 ...	...	...	18	51	8.15	46	14	3.2	3	0.60
158	17 Aquilæ 3 ...	3.5	...	18	59	4.00	76	20	20.6	5	0.61
159	41 Sagittarii τ ...	4.4	...	19	0	33.07	111	14	22.0	1	0.67
160	... ..	9.0	1	19	8	9.62	129	49	15.9	1	0.64
161	... ..	7.5	...	19	9	59.73	123	31	8.8	3	0.61
162	25 Aquilæ ω ...	5.8	...	19	11	20.16	78	39	3.4	2	0.63
163	44 Sagittarii ρ^1 ...	4.4	...	19	13	39.87	108	6	13.0	1	0.67
164	... ..	7.5	1	19	16	26.20	129	52	50.0	1	0.64
165	30 Aquilæ δ ...	3.6	...	19	18	32.33	87	9	26.7	3	0.61
166	... ..	8.5	1	19	24	47.69	129	56	11.3	1	0.64
167	51 Sagittarii λ^1 ...	6.0	...	19	27	38.72	115	1	4.1	1	0.68
168	62 Sagittarii λ^2 ...	5.3	...	19	28	18.28	115	11	4.6	3	0.62
169	... ..	9.0	...	19	34	15.31	127	17	18.3	1	0.64
170	50 Aquilæ γ ...	3.0	...	19	39	41.75	79	43	14.6	2	0.60
171	... ..	7.5	...	19	43	56.46	122	19	35.6	2	0.60
172	53 Aquilæ α ...	1.3	...	19	44	2.05	81	29	36.2	2	0.64
173	60 Aquilæ β ...	4.2	...	19	48	32.02	83	56	7.1	2	0.64
174	9208 Taylor ...	5.3	...	19	55	34.10	122	26	25.1	3	0.56
175	5 Capricorni α^1 ...	4.0	...	20	0	59.76	102	55	54.8	1	0.68

142, 145, 151, 152, 154, 155.—Comparison stars for Donati's comet of 1858.

150.—Vega..... 153.—R Scuti Var. 1.—Period 71 days.—Range—5th. to 9.6 magnitude.

156.—8 Lyræ Var. 1.—Period 129 days.—Range—3.5 to 4.6 magnitude.

157.—13 Lyræ Var. 2.—Period 46 days.—Range—4.2 to 4.6 magnitude.

161.—Comparison star for Pandora..... 172.—Altair.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
141	— Sagittarii γ^1 ...	+ 3.8310	+ 0.0022	...	+ 0.333	- 0.350	...	6107
142	8355 Taylor ...	+ 4.3378	+ 0.0024	...	+ 0.276	- 0.632	+ 0.13	6112
143	... ..	+ 4.2640	+ 0.0011	...	- 0.095	- 0.622	...	...
144	13 Sagittarii μ ...	+ 3.5575	+ 0.0009	- 0.001	- 0.482	- 0.523	+ 0.01	6168
145	7623 Lacaille ...	+ 4.3275	- 0.0002	...	- 0.316	- 0.631	...	...
146	7644 Lacaille ...	+ 4.2892	- 0.0010	...	- 0.770	- 0.622	...	...
147	8461 Taylor ...	+ 4.3678	- 0.0028	- 0.007	- 1.248	- 0.635	- 0.05	6228
148	22 Sagittarii λ ...	+ 3.7073	- 0.0013	- 0.005	- 1.701	- 0.537	+ 0.24	6263
149	... ..	+ 4.4148	- 0.0059	...	- 1.984	- 0.640	...	...
150	3 Lyrae α ...	+ 2.0130	+ 0.0016	+ 0.017	- 2.614	- 0.290	- 0.28	6356
151	... ..	+ 4.4757	- 0.0100	...	- 3.089	- 0.644	...	...
152	... ..	+ 4.4977	- 0.0103	...	- 3.108	- 0.647	...	...
153	R Scuti Var. 1 ...	+ 3.2070	- 0.0011	...	- 3.492	- 0.458	...	...
154	7872 Lacaille ...	+ 4.4095	- 0.0122	...	- 3.670	- 0.639	...	...
155	7878 Lacaille ...	+ 4.4685	- 0.0124	...	- 3.719	- 0.638	...	...
156	10 Lyrae β Var. 1 ...	+ 2.2137	+ 0.0015	- 0.002	- 3.912	- 0.315	+ 0.03	6429
157	13 Lyrae Var. 2 ...	+ 1.8232	+ 0.0008	- 0.001	- 4.436	- 0.257	...	6475
158	17 Aquilae ζ ...	+ 2.7578	+ 0.0003	- 0.006	- 5.112	- 0.387	+ 0.07	6528
159	41 Sagittarii π ...	+ 3.5731	- 0.0057	- 0.004	- 5.322	- 0.500	+ 0.03	6548
160	... ..	+ 4.1379	- 0.0146	...	- 5.673	- 0.574	...	...
161	... ..	+ 3.9167	- 0.0115	...	- 6.029	- 0.542	...	...
162	25 Aquilae ω ...	+ 2.8164	- 0.0003	- 0.003	- 6.143	- 0.358	- 0.02	6596
163	44 Sagittarii ρ^1 ...	+ 3.4869	- 0.0061	- 0.003	- 6.336	- 0.480	- 0.03	6619
164	... ..	+ 4.1277	- 0.0164	...	- 6.566	- 0.565	...	...
165	30 Aquilae δ ...	+ 3.0094	- 0.0018	+ 0.014	- 6.740	- 0.410	- 0.10	6646
166	... ..	+ 4.1157	- 0.0181	...	- 7.252	- 0.557	...	...
167	51 Sagittarii λ^1 ...	+ 3.6510	- 0.0100	- 0.002	- 7.465	- 0.491	0.00	6704
168	52 Sagittarii λ^2 ...	+ 3.6546	- 0.0102	+ 0.002	- 7.538	- 0.490	- 0.02	6706
169	... ..	+ 4.0054	- 0.0170	...	- 8.017	- 0.533	...	...
170	50 Aquilae γ ...	+ 2.8520	- 0.0011	+ 0.001	- 8.452	- 0.373	0.00	6772
171	... ..	+ 3.8325	- 0.0160	...	- 8.787	- 0.498	...	...
172	53 Aquilae α ...	+ 2.8917	- 0.0014	+ 0.036	- 8.795	- 0.374	- 0.38	6802
173	60 Aquilae β ...	+ 2.9457	- 0.0033	+ 0.002	- 9.146	- 0.378	+ 0.47	6833
174	9208 Taylor ...	+ 3.8161	- 0.0175	...	- 9.690	- 0.483	...	6877
175	5 Capricorni α^1 ...	+ 3.3316	- 0.0084	- 0.002	- 10.775	- 0.400	0.00	6972

142, 147.— Proper motions adopted from Mr. Stone's list in Vol. 49 "Memoirs of the Royal Astronomical Society."

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
176	6 Capricorni α^1 ...	5.0	...	20	10	23.66	102	58	11.7	3	0.67
177	39095 Lalande ...	8.0	1	20	14	34.16	106	15	51.4	3	0.61
178	... ..	8.5	1	20	16	43.30	121	12	10.2	1	0.64
179	11 Capricorni ρ ...	5.0	...	20	20	59.04	108	16	2.0	4	0.64
180	... ..	8.0	1	20	26	13.37	121	13	3.2	1	0.64
181	14 Capricorni τ^2 ...	5.7	...	20	31	33.07	105	26	10.2	1	0.58
182	... ..	8.0	1	20	35	48.56	123	58	55.6	1	0.64
183	50 Cygni α	1.7	...	20	36	43.61	45	12	41.5	5	0.62
184	... ..	8.0	1	20	43	29.30	124	58	32.5	1	0.64
185	32 Vulpecula ...	4.7	...	20	48	40.75	62	27	56.8	2	0.62
186	... ..	8.0	1	20	51	28.75	126	38	27.9	1	0.64
187	23 Capricorni θ ...	5.3	...	20	58	11.12	107	46	42.4	1	0.60
188	... ..	8.5	1	20	59	34.54	129	1	55.3	1	0.64
189	13 Aquarii ν ...	4.8	...	21	2	4.41	101	55	42.3	3	0.64
190	64 Cygni 3... ..	3.6	...	21	7	3.74	60	20	15.7	5	0.72
191	... ..	8.0	1	21	10	53.55	129	32	25.0	1	0.64
192	22 Aquarii β ...	3.2	...	21	24	17.53	96	10	36.2	4	0.75
193	... ..	9.0	...	21	29	47.18	98	25	59.4	2	0.58
194	23 Aquarii δ ...	5.3	...	21	30	24.08	98	28	16.2	2	0.65
195	8 Pegasi ϵ ...	3.3	...	21	37	24.43	80	45	21.5	5	0.73
196	49 Capricorni δ ...	3.7	...	21	39	25.10	106	45	5.5	1	0.68
197	16 Pegasi ...	5.5	...	21	46	47.11	64	43	22.2	6	0.76
198	31 Aquarii ϵ ...	4.7	...	21	56	10.36	92	49	12.8	1	0.76
199	34 Aquarii α ...	3.0	...	21	58	41.58	90	50	20.4	7	0.72
200	43 Aquarii θ ...	5.0	...	22	9	32.05	50	28	8.3	5	0.75
201	35 Aquarii 3 ...	5.0	...	22	21	43.40	90	43	28.4	1	0.83
202	... ..	9.0	...	22	21	45.03	100	38	23.4	2	0.64
203	150 R. P. L. ...	5.5	...	22	23	45.67	4	35	19.1	8	0.77
204	62 Aquarii η ...	4.3	...	22	28	15.85	90	49	40.3	16	0.77
205	153 R. P. L. ...	7.6	...	22	29	50.56	2	37	14.5	5	0.85
206	42 Pegasi 3 ...	4.7	...	22	31	34.73	79	53	16.6	10	0.75
207	XXII. 844 W. R. F. ...	9.0	...	22	40	28.04	87	49	19.8	1	0.79
208	24 Piscis Australis α ...	1.3	...	22	50	1.02	120	21	10.1	13	0.77
209	... ..	9.3	...	22	51	44.47	85	27	8.7	1	0.73
210	4 Piscium β ...	4.7	...	22	56	51.16	86	55	20.0	2	0.72

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
176	6 Capricorni α ¹ ...	+ 3.3314	- 0.0034	+ 0.001	- 10.806	- 0.403	0.00	6974
177	30095 Ialande ...	+ 3.3969	- 0.0100	...	- 11.113	- 0.408	...	...
178	... ..	+ 3.7420	- 0.0191	...	- 11.267	- 0.447	...	...
179	11 Capricorni ρ ...	+ 3.4324	- 0.0115	- 0.006	- 11.575	- 0.403	+ 0.01	7042
180	... ..	+ 3.7230	- 0.0200	...	- 11.944	- 0.431	...	...
181	14 Capricorni γ ¹ ...	+ 3.3634	- 0.0105	- 0.002	- 12.317	- 0.382	+ 0.03	7127
182	... ..	+ 3.7723	- 0.0231	...	- 12.608	- 0.423	...	...
183	50 Cygni α ...	+ 2.0433	+ 0.0021	- 0.002	- 12.671	- 0.226	0.00	7171
184	... ..	+ 3.7794	- 0.0247	...	- 13.123	- 0.410	...	...
185	32 Vulpecula ...	+ 2.5554	+ 0.0026	- 0.002	- 13.164	- 0.270	0.00	7256
186	... ..	+ 3.8001	- 0.0272	...	- 13.644	- 0.400	...	...
187	23 Capricorni θ ...	+ 3.3775	- 0.0128	+ 0.004	- 14.068	- 0.344	+ 0.06	7322
188	... ..	+ 3.8399	- 0.0306	...	- 14.155	- 0.390	...	...
189	13 Aquarii γ ...	+ 3.2099	- 0.0098	+ 0.001	- 14.309	- 0.328	+ 0.01	7344
190	64 Cygni 3 ...	+ 2.5504	+ 0.0038	- 0.003	- 14.612	- 0.248	+ 0.07	7368
191	... ..	+ 3.8146	- 0.0320	...	- 14.839	- 0.363	...	...
192	22 Aquarii β ...	+ 3.1628	- 0.0071	- 0.001	- 15.002	- 0.282	0.00	7479
193	... ..	+ 3.1928	- 0.0082	...	- 15.900	- 0.276	...	...
194	23 Aquarii 1 ...	+ 3.1929	- 0.0063	+ 0.004	- 15.933	- 0.276	+ 0.04	7514
195	8 Pegasi ε ...	+ 2.9452	- 0.0005	+ 0.003	- 16.298	- 0.242	0.00	7561
196	40 Capricorni 3 ...	+ 3.3037	- 0.0128	+ 0.014	- 16.399	- 0.270	+ 0.28	7590
197	16 Pegasi ...	+ 2.7253	+ 0.0050	+ 0.001	- 16.763	- 0.210	+ 0.01	7637
198	31 Aquarii α ...	+ 3.1059	- 0.0051	...	- 17.200	- 0.226	...	7672
199	34 Aquarii α ...	+ 3.0836	- 0.0041	- 0.003	- 17.312	- 0.219	+ 0.02	7688
200	43 Aquarii θ ...	+ 3.1642	- 0.0075	+ 0.006	- 17.771	- 0.206	+ 0.03	7773
201	55 Aquarii 3 ...	+ 3.0791	- 0.0033	+ 0.009	- 18.240	- 0.178	- 0.03	7832
202	... ..	+ 3.1765	- 0.0085	...	- 18.240	- 0.189	...	...
203	150 R. P. L. ...	- 3.7192	- 1.1627	+ 0.048	- 18.313	+ 0.229	- 0.05	7831
204	62 Aquarii γ ...	+ 3.0795	- 0.0031	+ 0.003	- 18.470	- 0.166	+ 0.06	7868
205	153 R. P. L. ...	- 8.1315	- 3.7919	...	- 18.525	+ 0.462	...	...
206	42 Pegasi 3 ...	+ 2.9851	+ 0.0023	+ 0.001	- 18.650	- 0.149	0.00	7908
207	XXII 844 W. D. E. ...	+ 3.0547	- 0.0012	...	- 18.860	- 0.143	...	...
208	24 Piscis Aust. α ...	+ 3.3073	- 0.0210	+ 0.022	- 19.128	- 0.135	+ 0.18	7992
209	... ..	+ 3.0408	+ 0.0006	...	- 19.172	- 0.122	...	...
210	4 Piscium β ...	+ 3.0524	+ 0.0001	+ 0.001	- 19.300	- 0.112	+ 0.02	8031

Mean Positions of Stars for 1862 January 1st,

Number.	Star.	Magnitude.	Estimation.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.	
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>			
211	53 Pegasi β Var. 1.	...	2.5	...	22	57	5.33	62	39	53.5	1	0.85
212	54 Pegasi α	...	2.0	...	22	57	53.25	75	32	12.5	16	0.75
213	6 Piscium γ	...	4.2	...	23	10	0.65	87	28	16.2	18	0.78
214	...	...	9.3	...	23	10	50.17	127	25	13.4	1	0.78
215	...	...	8.0	1	23	11	30.98	129	58	31.4	1	0.76
216	...	...	8.0	1	23	12	6.44	127	25	28.9	1	0.78
217	8 Piscium κ	...	5.7	...	23	19	51.44	80	29	58.5	12	0.79
218	10 Piscium θ	...	5.0	...	23	20	58.00	84	22	42.9	1	0.61
219	158 R. P. L.	...	5.7	...	23	27	50.26	3	27	14.0	2	0.78
220	17 Piscium ι	...	4.5	...	23	32	51.16	85	7	16.6	10	0.80
221	9593 Lacaille	...	8.0	1	23	38	43.99	128	44	33.2	1	0.84
222	...	...	8.5	1	23	40	57.87	128	47	18.4	1	0.75
223	— Sculptoris δ	...	4.3	...	23	41	43.91	118	53	36.1	7	0.78
224	...	...	8.5	...	23	41	51.93	142	5	4.4	1	0.82
225	R Cassiopeæ Var. 3.	...	6.0	1	23	51	24.70	39	22	48.8	2	0.83
226	...	...	9.3	...	23	51	52.94	143	16	38.8	1	0.82
227	28 Piscium w	...	4.3	...	23	52	13.54	83	54	2.2	9	0.80

211.—Scheat.—Supposed to vary irregularly between 2.2 and 2.7 magnitudes.

212.—Markab.

225.—R Cassiopeæ Var. 3.—Period 426 days.—Range—5th. magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
211	53 Pegasi β Var. 1 ...	+ 2'8848	+ 0'0117	+ 0'016	- 19'305	- 0'106	- 0'17	5032
212	54 Pegasi α ...	+ 2'9797	+ 0'0056	+ 0'003	- 19'323	- 0'107	+ 0'02	5034
213	6 Piscium γ ...	+ 3'0592	+ 0'0005	+ 0'047	- 19'581	- 0'087	+ 0'01	5105
214	... ..	+ 3'2592	- 0'0264	...	- 19'598	- 0'093	...	...
215	... ..	+ 3'3073	- 0'0290	...	- 19'603	- 0'093	...	...
216	... ..	+ 3'2843	- 0'0263	...	- 19'618	- 0'087	...	...
217	8 Piscium α ...	+ 3'0699	0'0000	+ 0'005	- 19'745	- 0'069	+ 0'12	5109
218	10 Piscium θ ...	+ 3'0498	+ 0'0026	- 0'011	- 19'765	- 0'067	+ 0'06	5177
219	158 R. P. L. ...	- 0'0268	- 0'4971	+ 0'054	- 19'853	+ 0'010	- 0'01	5213
220	17 Piscium ϵ ...	+ 3'0584	+ 0'0030	+ 0'025	- 19'916	- 0'042	+ 0'45	5223
221	9583 Lacaille ...	+ 3'1715	- 0'0243	...	- 19'969	- 0'084	...	...
222	... ..	+ 3'1611	- 0'0244	...	- 19'987	- 0'029	...	...
223	— Sculptoris δ ...	+ 3'1307	- 0'0161	+ 0'003	- 19'992	- 0'026	+ 0'07	5275
224	... ..	+ 3'2078	- 0'0408	...	- 19'993	- 0'023	...	...
225	R Cassiop. Var. 3 ...	+ 3'0110	+ 0'0364	...	- 20'041	- 0'007	...	...
226	... ..	+ 3'1356	- 0'0402	...	- 20'042	- 0'007	...	...
227	28 Piscium ω ...	+ 3'0671	+ 0'0047	+ 0'010	- 20'044	- 0'005	+ 0'13	5331

211.—Proper Motions adopted from the "*British Association Catalogue*."

223.—Proper Motions deduced from "*Nautical Almanac for 1862*."

SEPARATE RESULTS
OF
OBSERVATIONS
MADE WITH THE
MADRAS MERIDIAN CIRCLE
IN THE YEAR
1863.

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
1	21 Andromedæ a ...	Oct. 29	R	0	1	18.56	...	61	39	59.3	
		" 30	R		1	18.68	..		39	59.1	...
		Nov. 7	M		1	18.74	...		39	58.9	...
		" 13	M		1	18.61	...		40	0.6	...
2		Oct. 10	M	0	6	3.70	...	148	40	35.9	6.2
		Nov. 11	M		6	3.57	...		40	37.1	6.3
3	88 Pegasi γ ...	Aug. 29	R	0	6	10.93	...	75	34	43.2	...
		Oct. 30	R		6	11.11	...		34	43.4	...
		" 31	R		6	10.95	...		34	42.8	...
		Nov. 6	M		6	10.95	...		34	44.0	...
		" 9	M		6	10.94	...		34	43.3	...
		" 13	M		6	10.93	...		34	44.0	...
4		Oct. 17	R	0	9	19.71	5	149	32	9.0	8.7
		Nov. 4	M		9	20.07	..		32	13.7	9.0
5		Nov. 2	M	0	12	44.45	...	150	26	58.0	9.4
6	41 Piscium d... ..	Sep. 26	R	0	13	32.96	...	82	34	16.0	...
7	R Andromedæ Var. 1.	Aug. 29	R	0	16	48.24	...	52	10	54.0	9.5
		" 31	R		16	48.19	...		10	55.2	9.4
		Oct. 17	R		16	48.30	..		10	54.9	7.8
		Nov. 3	M		16	47.82	...		10	56.6	7.7
		" 6	M		16	48.26	...		10	56.3	7.8
8		Oct. 10	M	0	17	34.80	..	149	35	28.0	10.0
		" 29	R		17	34.90	5		35	30.6	9.8
		Nov. 4	M		17	34.80	..		35	30.4	9.7
		" 13	M		17	34.43	.		35	29.0	9.4
9	45 Piscium	Sep. 26	R	0	18	38.23	...	83	4	0.1	...
		Nov. 20	R		18	38.19	6		3	59.8	...
		" 31	R		18	38.16	..		3	59.5	...
10	12 Ceti	Oct. 31	R	0	23	2.90	...	91	42	54.1	...
		Nov. 7	M		23	2.78	...		42	53.8	...
		" 9	M		23	2.61	...		42	54.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance 1863.			Magnitude.
				A.	m.	s.		°	'	"	
10	12 Ceti	Nov. 11	M	0	23	2.78	...	84	42	54.6	...
	...	" 14	M		23	2.83	...		42	55.2	...
	...	" 18	R		23	2.77	...		42	52.9	...
11	...	Nov. 23	R	0	25	18.92	5	76	9	33.2	10.5
12	...	Oct. 10	M	0	28	50.71	...	80	7	55.6	9.2
	...	" 29	R		28	50.72	5		7	56.2	9.6
	...	" 30	R		28	50.65	5		7	55.8	...
	...	" 31	R		28	50.61	...		7	54.5	9.7
	...	Nov. 2	M		28	50.62	...		7	54.8	9.7
	...	" 4	M		28	50.81	...		7	55.9	9.5
	...	" 5	M		28	50.50	...		7	56.1	9.4
13	...	Aug. 29	R	0	30	44.80	4	80	7	52.9	9.8
	...	" 31	R		30	44.78	5		7	56.5	9.9
	...	Oct. 17	R		30	44.97	5		7	54.4	9.2
	...	" 29	R		30	44.87	...		7	54.0	9.9
	...	" 30	R		30	45.13	5		7	53.8	...
	...	" 31	R		30	44.75	...		7	53.8	9.7
	...	Nov. 4	M		30	44.74	...		7	55.6	9.6
	...	" 5	M		30	44.72	...		7	55.1	9.5
	...	" 6	M		30	44.60	...		7	53.7	9.3
14	18 Cassiopeiæ a Var. 1.	Dec. 7	M	0	32	45.05	...	34	12	54.3	...
	...	" 8	M		32	45.03	...		12	53.9	...
15	1097 Lalande	Nov. 3	M	0	34	32.78	...	80	0	17.3	8.2
	...	" 9	M		34	32.62	...		0	16.8	8.0
	...	" 11	M		34	32.63	...		0	17.1	8.0
	...	" 13	M		34	32.61	...		0	17.9	8.0
	...	" 14	M		34	32.71	...		0	17.9	8.0
	...	" 20	R		34	32.77	5		0	16.7	8.2
16	1123 Lalande	Oct. 30	R	0	35	38.94	...	80	3	21.6	9.2
	...	" 31	R		35	38.84	...		3	20.8	9.1
	...	Nov. 11	M		35	38.91	4		3	21.5	9.0
	...	" 14	M		35	39.00	5		3	22.4	8.9

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
16	1123 Lalande	Nov. 20	R	0	35	38.88	5	89	3	21.4	9.0
	...	" 21	R		35	38.80	5		3	21.1	8.9
	...	" 23	R		35	38.86	...		3	22.5	8.7
	...	" 24	R		35	38.95	6		3	20.9	8.8
17	16 Ceti β	Nov. 18	R	0	36	42.64	...	108	44	19.8	...
	...	Dec. 30	M		36	42.73	...		44	22.0	...
18	1108 Lalande	Oct. 28	R	0	38	3.46	...	58	56	36.3	8.7
	...	" 29	R		38	3.41	5		56	36.9	8.3
	...	Nov. 4	M		38	3.46	3		56	38.1	8.9
	...	" 6	M		38	3.61	...		56	37.0	8.9
	...	Dec. 8	M		38	3.45	5		56	37.6	8.9
	...	" 15	M		38	3.53	...		56	36.1	8.9
	...	" 18	R		38	3.58	4		56	36.2	9.2
	...	" 22	R		38	3.52	4		56	37.3	...
	...	" 23	R		38	3.51	4		56	36.5	8.7
	...	...	...								
19	0.658 W. B. E.	Oct. 17	R	0	38	31.93	...	82	2	31.3	9.3
	...	" 30	R		38	31.99	0		2	33.8	9.5
	...	" 31	R		38	31.85	...		2	31.9	9.3
	...	Nov. 5	M		38	31.89	...		2	31.4	10.0
	...	" 23	R		38	35.06	5		2	32.2	9.5
	...	" 24	R		38	34.92	5		2	33.3	9.5
	...	Dec. 18	R		38	34.98	4		2	31.7	9.7
	...	" 22	R		38	34.93	4		2	32.6	...
	...	" 23	R		38	34.94	4		2	33.1	9.5
	...	...	...								
20	63 Placidus δ	Aug. 31	R	0	41	34.52	5	83	9	41.0	...
	...	Nov. 20	R		41	34.58	...		9	40.9	...
21	...	Oct. 29	R	0	41	37.12	5	49	6	55.9	9.5
	...	Nov. 2	M		41	37.05	6		6	56.1	9.5
	...	Dec. 7	M		41	36.97	...		6	54.5	9.0
	...	" 14	M		41	37.01	4		6	55.9	9.1
	...	" 16	R		41	37.00	4		6	56.2	...
	...	" 17	R		41	37.04	6		6	57.1	9.5
22	...	Aug. 29	R	0	42	6.11	5	88	49	49.7	10.0
	...	Oct. 10	M		42	5.86	...		49	48.6	10.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No of Wires.	Mean Polar Distances. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
22	...	Oct. 26	R	0	42	6.11	5	88	40	49.1	9.8
	...	" 31	R		42	6.01	4		40	48.5	9.7
	...	Nov. 7	M		42	5.70	...		40	47.8	10.0
	...	" 9	M		42	6.03	...		40	48.1	10.0
	...	" 23	R		42	6.04	5		40	48.5	9.9
	...	Dec. 15	M		42	6.09	...		40	46.8	10.0
	...	" 18	R		42	5.96	6		40	49.2	10.0
	...	" 19	R		42	5.94	...		40	49.4	...
23	0806 W. B. E.	Oct. 26	R	0	46	36.92	...	88	50	6.3	9.1
	...	Nov. 3	M		46	36.76	...		50	5.6	10.0
	...	" 4	M		46	36.92	...		50	5.5	10.0
	...	" 6	M		46	36.69	...		50	7.7	10.0
	...	" 13	M		46	36.82	...		50	6.7	9.5
	...	" 14	M		46	36.73	...		50	6.8	9.5
	...	" 24	R		46	36.97	5		50	5.7	9.6
24	...	Oct. 1	M	0	47	53.11	...	133	47	34.4	...
25	1638 Lalande	Oct. 29	R	0	50	37.45	...	88	57	24.6	7.5
	...	" 30	R		50	37.52	5		57	24.8	7.8
	...	Nov. 9	M		50	37.40	...		57	25.3	7.8
	...	" 11	M		50	37.42	...		57	25.1	7.8
	...	" 18	R		50	37.38	6		57	24.7	...
	...	Dec. 8	M		50	37.43	...		57	25.6	7.8
	...	" 10	M		50	37.54	...		57	24.7	7.8
26	1639 Lalande	Oct. 28	R	0	50	39.25	5	88	38	55.8	9.2
	...	Nov. 2	M		50	39.48	...		38	57.1	8.9
	...	" 20	R		50	39.27	...		38	54.7	8.7
	...	" 23	R		50	39.38	...		38	53.7	...
	...	" 28	R		50	39.51	5		38	54.2	...
	...	Dec. 7	M		50	39.32	...		38	54.4	8.9
	...	" 14	M		50	39.16	...		38	55.1	8.9
27	271 Lacaille...	Oct. 9	M	0	52	39.82	...	151	26	17.1	7.8
28	1784 Lalande	Oct. 29	R	0	54	55.91	...	88	12	48.6	8.1
	...	Nov. 3	M		54	55.76	...		12	48.9	8.0
	...	" 5	M		54	55.91	...		12	47.4	8.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
28	1784 Lalande ...	Oct. 6	M	0	54	55.82	...	88	12	49.4	8.0
		" 7	M		54	55.91	...		12	47.3	8.0
		" 23	R		54	55.93	6		12	49.3	8.3
		" 24	R		54	55.99	6		12	48.5	8.2
29	71 Piscium ...	Dec. 16	R	0	55	50.12	...	82	50	53.8	...
		" 17	R		55	50.12	...		50	50.1	...
		" 18	R		55	50.10	...		50	51.7	...
		" 19	R		55	50.09	...		50	51.3	...
		" 21	R		55	50.11	...		50	51.8	...
		" 23	R		55	50.03	...		50	51.3	...
		" 24	R		55	50.07	...		50	51.8	...
		" 25	R		55	50.09	...		50	51.3	...
		" 26	R		55	50.06	...		50	51.0	...
		" 29	M		55	50.06	...		50	51.6	...
30	1879 Lalande ...	Oct. 28	R	0	57	40.70	...	88	25	16.3	7.0
		" 30	R		57	40.91	...		25	15.1	8.0
		Nov. 13	M		57	40.88	...		25	16.8	7.8
		" 14	M		57	40.81	...		25	16.1	7.8
		" 18	R		57	40.71	4		25	15.0	...
		" 20	R		57	40.88	...		25	15.4	7.8
		" 25	R		57	40.82	...		25	14.6	7.0
31	0-1031 W. B. E. ...	Nov. 4	M	0	59	4.84	...	88	6	10.2	9.0
		" 9	M		59	4.87	...		6	8.1	9.0
		" 11	M		59	4.95	...		6	9.3	9.0
		" 21	R		59	4.82	6		6	9.4	9.2
		" 28	R		59	4.94	...		6	7.1	9.0
		Dec. 8	M		59	4.68	...		6	9.9	9.0
		" 9	M		59	4.91	...		6	8.6	9.0
32		Oct. 6	M	1	2	9.01	...	87	57	26.8	10.0
		" 8	M		2	8.81	...		57	27.9	10.0
		" 10	M		2	8.76	3		57	25.9	10.0
		" 28	R		2	8.98	6		57	28.1	9.8
		" 29	R		2	8.96	...		57	28.7	9.4
		" 31	R		2	8.91	...		57	27.6	9.7
		Nov. 6	M		2	8.87	...		57	27.2	9.6

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
32		Nov. 6	M	1	3	8.65	...	57	57	29.1	9.7
		" 23	R		2	8.84	5		57	27.6	10.0
		" 24	R		2	8.99	6		57	28.2	9.8
33	I. 15 W. B. E. ...	Oct. 30	R	1	2	57.22	5	57	39	1.3	9.7
		Nov. 7	M		2	56.91	...		39	0.2	9.0
		" 25	R		2	57.04	5		39	1.4	9.0
		Dec. 14	M		2	57.13	4		39	2.5	9.0
		" 15	M		2	57.13	...		39	0.7	9.0
		" 17	R		2	57.01	...		39	3.3	9.7
		" 18	R		2	57.09	...		39	2.8	9.5
		" 19	R		2	57.08	...		39	1.5	9.9
		" 21	R		2	57.10	...		39	2.8	9.5
34	2050 Lalande ...	Nov. 4	M	1	3	24.37	...	58	10	34.3	5.9
		" 21	R		3	24.36	...		10	35.4	5.0
		" 28	R		3	24.40	...		10	35.2	5.7
		Dec. 9	M		3	24.54	...		10	35.4	5.9
		" 23	R		3	24.31	6		10	35.1	9.0
		" 24	R		3	24.30	4		10	35.1	...
		" 26	R		3	24.42	4		10	34.1	...
35	23 Ceti ...	Dec. 26	R	1	3	30.55	4	58	17	4.6	...
		" 29	M		3	30.85	2		17	6.0	...
		" 30	M		3	30.60	...		17	6.1	...
		" 31	M		3	30.53	...		17	6.1	...
36	86 Piacium 3 ...	Aug. 31	R	1	6	34.49	5	53	9	1.1	...
		Sep. 28	R		6	34.50	...		9	0.4	...
		Dec. 19	R		6	34.45	...		9	0.6	...
37	I. 101 W. B. E. ...	Oct. 28	R	1	7	42.79	...	57	54	19.1	9.2
		Nov. 18	R		7	42.70	...		54	16.3	...
		" 23	R		7	42.66	...		54	15.2	5.2
		" 24	R		7	42.67	6		54	17.5	9.0
		" 28	R		7	42.75	...		54	17.7	5.9
		Dec. 10	M		7	42.70	...		54	17.5	9.0
		" 14	M		7	42.73	...		54	19.5	9.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
38	1 Ursæ Minoris α s.p.	Apl. 8	M	1	8	59.31	3	1	25	15.1	...
	... s.p.	" 10	M		8	59.82	3		25	17.0	...
	... s.p.	" 13	M		8	59.53	3		25	15.4	...
	... s.p.	" 15	M		9	0.06	3		25	14.4	...
	... s.p.	May 9	M		8	59.61	3		25	15.6	...
	... s.p.	" 19	R		8	59.69	3		25	15.3	...
	... s.p.	" 26	R		8	59.95	3		25	15.4	...
	...	Dec. 12	M		8	59.64	2		25	14.5	...
	...	" 17	R		8	59.13	2		25	16.4	...
39	...	Oct. 29	R	1	9	13.09	...	67	42	24.2	9.7
	...	" 30	R		9	13.19	5		42	24.6	9.8
	...	" 31	R		9	12.97	...		42	25.0	9.6
	...	Nov. 9	M		9	13.05	...		42	24.3	9.6
	...	" 11	M		9	12.95	...		42	24.7	10.0
	...	" 13	M		9	12.88	...		42	24.9	10.0
	...	" 14	M		9	12.92	...		42	24.6	9.7
	...	" 21	R		9	13.03	...		42	23.9	9.8
40	45 Ceti θ ...	Aug. 31	R	1	17	10.50	...	98	53	29.0	...
	...	Oct. 29	R		17	10.51	...		53	29.3	...
	...	Nov. 25	R		17	10.47	...		53	28.7	...
	...	" 30	R		17	10.50	...		53	28.9	...
	...	Dec. 16	R		17	10.63	...		53	29.0	...
	...	" 17	R		17	10.52	...		53	31.0	...
	...	" 21	R		17	10.55	...		53	29.9	...
	...	" 23	R		17	10.52	...		53	30.2	...
	...	" 25	R		17	10.56	...		53	28.4	...
	...	" 26	R		17	10.59	...		53	29.4	...
	...	" 30	M		17	10.47	...		53	30.8	...
	...	" 31	M		17	10.44	...		53	29.9	...
41	...	Nov. 28	R	1	23	24.98	5	87	44	17.1	8.0
	...	Dec. 8	M		23	24.91	...		44	17.3	8.1
42	R. Piscium Var 1 ..	Dec. 23	R	1	23	31.40	4	87	49	43.5	10.2
43	29 Piscium γ... ..	Aug 31	R	1	24	9.37	5	75	21	43.6	...
	...	Oct. 26	R		24	9.37	5		21	43.8	...
	...	Nov 14	M		24	9.30	...		21	44.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		"	'	"	
43	99 Piscium γ ...	Nov. 21	R	1	24	9.32	...	75	21	43.1	...
	... ..	" 23	R		24	9.35	5		21	42.4	...
	... ..	Dec. 17	R		24	9.32	...		21	45.0	...
	... ..	" 21	R		24	9.29	...		21	43.3	...
	... ..	" 25	R		24	9.30	...		21	42.6	...
	... ..	" 26	R		24	9.31	5		21	43.0	...
	... ..	" 31	M		24	9.35	...		21	43.4	...
44	102 Piscium π ...	Oct. 20	R	1	29	50.23	...	78	33	39.1	...
45	525 Taylor ...	Nov. 4	M	1	30	7.00	...	148	50	23.0	5.9
	... ..	" 5	M		30	6.86	...		50	24.3	5.9
46	539 Taylor ...	Nov. 3	M	1	31	43.84	5	148	58	15.6	5.5
	... ..	" 6	M		31	43.49	5		58	17.6	5.7
47	— Eridani α ...	Nov. 19	R	1	32	36.63	5	147	56	2.4	...
	... ..	Dec. 22	R		32	36.78	...		56	2.9	...
48	106 Piscium ν ...	Oct. 29	R	1	34	18.22	...	85	13	25.4	...
	... ..	Nov. 14	M		34	18.22	...		12	26.7	...
	... ..	" 21	R		34	18.24	...		12	24.4	...
	... ..	Dec. 8	M		34	18.30	...		12	25.7	...
	... ..	" 11	M		34	18.18	...		12	24.8	...
49	503 Lacaille ...	Nov. 11	M	1	35	40.00	...	151	41	37.3	7.5
	... ..	" 25	R		35	40.23	...		41	36.2	8.3
50	507 Lacaille ...	Nov. 7	M	1	37	6.61	...	151	28	49.2	6.0
	... ..	" 28	R		37	6.38	...		28	51.4	6.3
51	110 Piscium ϵ ...	Nov. 21	R	1	38	9.67	...	81	31	50.8	...
52	... ..	Oct. 28	R	1	39	51.31	...	140	27	30.0	9.0
	... ..	Nov. 2	M		39	51.70	5		27	41.1	9.5
53	... ..	Nov. 11	M	1	46	7.50	5	148	54	15.5	9.7
	... ..	Dec. 8	M		46	7.53	3		54	14.7	9.6

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
54	6 Arietis β ...	Oct. 29	R	1	47	4.62	...	69	51	48.4	...
		Nov. 4	M		47	4.62	...		51	48.9	...
		" 9	M		47	4.59	...		51	48.4	...
		" 18	R		47	4.59	...		51	48.4	...
		" 21	R		47	4.57	...		51	48.5	...
		" 30	R		47	4.57	...		51	49.1	...
		Dec. 7	M		47	4.40	...		51	49.8	...
		" 10	M		47	4.08	...		51	49.3	...
		" 11	M		47	4.59	...		51	49.9	...
		" 12	M		47	4.57	...		51	47.7	...
		" 19	R		47	4.72	...		51	48.6	...
		" 24	R		47	4.70	...		51	47.8	...
		" 31	M		47	4.61	...		51	49.1	...
55	...	Nov. 7	M	1	48	31.03	5	150	5	31.2	9.3
		" 25	R		48	31.15	6		5	30.8	9.5
56	552 Lacaille ...	Nov. 3	M	1	50	52.87	...	145	44	39.0	8.7
		" 6	M		50	52.65	...		44	40.1	8.5
57	...	Nov. 7	M	1	59	21.53	...	150	2	49.2	9.6
		" 25	R		59	21.63	...		2	50.6	9.5
58	13 Arietis α ...	Nov. 14	M	1	59	27.26	...	67	11	16.2	...
		" 28	R		59	27.34	...		11	14.9	...
		" 30	R		59	27.35	5		11	14.9	...
		Dec. 8	M		59	27.28	...		11	15.9	...
		" 11	M		59	27.34	...		11	15.5	...
		" 14	M		59	27.32	...		11	15.8	...
		" 15	M		59	27.30	...		11	14.5	...
		" 16	R		59	27.22	...		11	14.2	...
		" 24	R		59	27.31	...		11	15.5	...
		" 29	M		59	27.35	...		11	15.9	...
59	630 Lacaille ...	Nov. 5	M	1	59	46.48	...	145	32	17.5	6.0
		" 13	M		59	46.48	...		32	18.3	6.0
60	...	Oct. 29	R	2	1	1.61	5	149	49	17.8	9.6
		Nov. 2	M		1	1.56	6		49	23.9	9.6

Separate Results of Madras Meridian Circle Observations in 1863.

Number	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance 1863.			Magnitude.
				A.	m.	s.		°	'	"	
61	697 Taylor	Nov. 6	M	2	1	41.07	...	145	44	10.5	7.0
		Dec. 17	R		1	43.78	5		44	15.2	7.8
62	17 Arietis γ	Dec. 19	R	2	5	8.15	...	69	26	5.5	...
63	677 Lacaille	Nov. 7	M	2	6	51.10	5	149	47	52.8	8.0
64	... ..	Nov. 11	M	2	6	50.71	...	145	39	46.7	9.8
65	67 Ceti	Dec. 7	M	2	10	9.09	...	97	3	19.4	...
		" 8	M		10	9.01	...		3	20.0	...
		" 10	M		10	9.01	...		3	19.2	...
		" 11	M		10	9.01	...		3	19.2	...
		" 14	M		10	9.05	...		3	21.2	...
		" 29	M		10	9.10	...		3	21.0	...
66	68 Ceti α Var. 1	Dec. 17	R	2	12	25.64	...	93	36	8.6	7.8
67	... ..	Oct. 27	R	2	13	56.42	5	145	27	13.6	9.7
		Nov. 4	M		13	56.25	4		27	14.2	9.6
68	... ..	Nov. 9	M	2	15	38.11	5	152	34	27.8	7.1
		Dec. 18	R		15	37.64	5		34	28.0	9.0
69	818 Taylor	Oct. 26	R	2	19	6.27	5	147	26	14.6	8.5
		" 27	R		19	6.51	5		26	15.0	8.0
70	73 Ceti ξ ⁹	Nov. 18	R	2	20	52.68	...	82	9	20.7	...
		" 23	R		20	52.59	...		9	21.8	...
		" 28	R		20	52.70	...		9	20.8	...
		Dec. 7	M		20	52.67	...		9	20.8	...
		" 10	M		20	52.61	...		9	21.1	...
		" 12	M		20	52.66	...		9	20.6	...
		" 14	M		20	52.64	5		9	22.8	...
		" 15	M		20	52.60	...		9	21.2	...
71	— Horologii A	Nov. 13	M	2	21	4.08	...	150	54	36.9	6.0
		Dec. 19	R		21	4.21	...		54	34.7	7.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
72	26 R. P. L.	Nov. 14	M	2	22	11.74	3	3	33	14.9	...
		" 26	R		22	11.90	2		33	10.1	..
73	... ..	Nov. 9	M	2	24	13.73	...	152	35	55.2	9.3
		Dec. 18	R		24	13.58	5		35	56.7	9.5
74	... ..	Oct. 26	R	2	27	23.67	..	147	12	29.7	8.7
		" 27	R		27	23.69	4		12	28.1	8.8
75	31 Arietis	Nov. 23	R	2	29	9.85	...	78	8	55.0	...
76	849 Lacaille (1st) ...	Nov. 9	M	2	35	59.20	...	150	9	25.0	7.8
77	849 Lacaille (2nd) ...	Dec. 10	M	2	36	3.93	...	150	9	32.8	7.9
		" 14	M		36	3.78	2		9	31.6	8.0
78	86 Ceti γ	Oct. 28	R	2	36	12.30	6	87	20	40.8	...
		Nov. 20	R		36	12.23	...		20	37.5	...
		Dec. 7	M		36	12.14	...		20	37.6	...
		" 8	M		36	12.17	...		20	38.5	..
		" 12	M		36	12.21	...		20	36.4	...
		" 18	R		36	12.26	5		20	41.5	...
79	38 Arietis	Nov. 23	R	2	37	29.97	5	78	7	55.9	...
80	868 Lacaille	Oct. 26	R	2	38	31.18	...	147	13	27.5	8.0
		" 27	R		38	31.17	...		13	26.4	8.5
81	... ..	Dec. 15	M	2	43	16.32	..	148	0	51.6	8.7
82	... ..	Oct. 26	R	2	44	27.54	5	148	14	5.1	8.8
		" 27	R		44	27.45	..		14	5.9	8.7
83	... ..	Nov. 26	R	2	45	12.36	5	76	28	9.1	9.0
84	48 Arietis ε	Oct. 26	R	2	51	22.97	...	149	12	38.0	...
		" 27	R		51	23.01	...		12	37.7	..
85	... ..	Dec. 8	M	2	52	2.72	..	150	17	22.3	8.5

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
80	92 Ceti α	Nov. 23	R	2	55	7.21	...	86	27	0.5	...
	... ..	" 24	R		55	7.23	...		27	0.0	...
	... ..	" 26	R		55	7.15	...		27	0.4	...
	... ..	" 28	R		55	7.12	...		27	0.2	...
	... ..	Dec. 10	M		55	7.14	...		27	0.4	...
	... ..	" 12	M		55	7.16	...		26	63.6	...
	... ..	" 22	R		55	7.17	...		27	1.0	...
	... ..	" 23	R		55	7.20	...		27	1.2	...
87	25 Persei ρ Var. 2 ...	Dec. 11	M	2	56	24.33	...	51	41	39.0	...
88	26 Persei β Var. 1 ...	Dec. 19	R	2	59	15.82	...	49	34	55.4	...
89	1047 Taylor	Nov. 7	M	2	59	50.11	...	151	20	4.8	6.0
90	33 R. P. L.	Jan. 9	M	3	0	29.64	5	5	35	4.3	...
	... ..	" 10	M		0	30.02	3		35	3.3	...
91	57 Arietis δ	Oct. 26	R	3	3	47.94	...	70	47	40.7	...
	... ..	" 27	R		3	47.94	...		47	38.0	...
	... ..	Nov. 23	R		3	47.96	...		47	39.8	...
	... ..	" 24	R		3	47.99	...		47	39.4	...
	... ..	Dec. 30	M		3	48.00	...		47	39.9	...
92	... ..	Jan. 16	M	3	12	38.90	5	130	50	30.1	8.5
	... ..	Dec. 14	M		12	38.92	4		50	30.7	8.5
	... ..	" 22	R		12	39.02	...		50	30.7	9.0
93	61 Arietis γ^1	Nov. 23	R	3	13	19.29	...	60	20	59.3	...
	... ..	" 24	R		13	19.37	...		20	59.4	...
94	... ..	Oct. 26	R	3	14	49.93	5	150	6	32.6	9.2
95	1 Tauri α	Dec. 12	M	3	17	26.50	...	81	27	20.8	...
96	... ..	Oct. 27	R	3	20	16.48	5	149	19	7.8	9.0
97	R Persei Var. 3	Dec. 22	R	3	21	20.25	...	54	48	15.6	9.7
	... ..	" 23	R		21	20.20	6		48	15.2	10.2

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
98		Nov. 18	R	3	21	50.75	...	88	12	37.5	7.5
99		Nov. 13	M	3	25	51.94	...	87	53	32.0	9.0
		" 27	R		25	51.95	...		53	28.5	9.4
100	1133 Lacaille	Dec. 8	M	3	35	14.00	...	146	35	24.7	8.3
101	1200 Lacaille	Nov. 14	M	3	36	23.16	...	146	40	44.3	6.7
102		Nov. 26	R	3	38	3.95	5	146	12	2.8	9.0
103	35 Tauri γ	Jan. 5	M	3	39	20.69	...	66	19	16.4	...
		" 6	M		39	20.75	...		19	17.6	...
		" 8	M		39	20.73	...		19	18.1	...
		" 10	M		39	20.72	...		19	18.4	...
		Oct. 27	R		39	20.64	5		19	19.6	...
		" 28	R		39	20.65	...		19	19.4	...
		Dec. 9	M		39	20.59	...		19	19.1	...
		" 15	M		39	20.66	...		19	17.6	...
		" 22	R		39	20.55	...		19	18.5	...
		" 23	R		39	20.59	...		19	18.6	...
104		Feb. 5	R	3	45	8.33	5	76	27	54.2	...
		Nov. 26	R		45	8.48	5		27	55.6	8.6
		Dec. 22	R		45	8.35	5		27	56.0	9.0
105	34 Eridani γ^1	Jan. 5	M	3	51	38.22	...	103	54	1.1	...
		" 6	M		51	38.23	...		54	1.9	...
		" 8	M		51	38.23	...		54	2.1	...
		Nov. 25	R		51	38.25	...		54	2.0	...
		" 27	R		51	38.25	...		54	3.0	...
		Dec. 9	M		51	38.20	...		54	2.7	...
		" 14	M		51	38.29	...		54	4.7	...
		" 22	R		51	38.34	...		54	3.0	...
106		Nov. 24	R	3	53	2.96	...	128	23	35.7	10.0
107	35 Tauri λ Var. 1	Jan. 9	M	3	53	5.23	5	77	52	6.9	...
		" 10	M		53	5.63	...		54	7.9	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
108	... ..	Dec. 12	M	3	53	38.68	5	143	8	33.2	8.1
109	37 Tauri A ¹ ...	Oct. 27	R	3	56	35.92	5	68	17	46.3	...
	... ..	" 28	R		56	35.86	5		17	47.1	...
	... ..	Dec. 22	R		56	35.87	...		17	46.2	...
110	7561 Lalande ...	Feb. 5	R	3	58	10.37	6	74	52	31.5	9.0
	... ..	" 9	R		58	10.41	5		52	30.7	...
111	... ..	Feb. 2	R	4	3	20.55	4	68	30	27.2	10.0
	... ..	Nov. 24	R		3	20.45	4		30	28.3	10.3
112	7764 Lalande ...	Feb. 5	R	4	3	24.83	...	74	44	0.8	8.5
	... ..	" 9	R		3	24.96	5		44	2.1	8.3
113	... ..	Nov. 27	R	4	3	41.01	...	146	56	39.5	9.2
114	38 Eridani o ¹ ...	Jan. 15	M	4	5	10.70	...	97	11	51.4	...
	... ..	Dec. 18	R		5	10.74	...		11	51.7	...
115	1419 Lacaille ...	Jan. 16	M	4	13	25.56	5	143	39	54.7	8.0
	... ..	Oct. 26	R		13	25.52	...		39	54.7	8.2
116	... ..	Nov. 27	R	4	13	44.17	5	70	51	40.1	8.8
	... ..	Dec. 12	M		13	44.12	...		51	40.6	9.0
117	... ..	Feb. 2	R	4	15	37.57	6	128	39	56.9	9.5
	... ..	" 5	R		15	37.80	4		39	59.9	9.5
118	... ..	Dec. 8	M	4	16	44.94	3	149	4	31.4	8.7
119	74 Tauri ...	Jan. 5	M	4	20	37.18	...	71	7	35.5	...
	... ..	" 6	M		20	37.11	...		7	36.9	...
	... ..	" 9	M		20	37.23	...		7	36.8	...
	... ..	" 10	M		20	37.10	...		7	37.0	...
	... ..	" 14	M		20	37.26	...		7	35.8	...
	... ..	" 15	M		20	37.28	...		7	36.0	...
	... ..	" 17	R		20	37.16	...		7	35.8	...
	... ..	Oct. 28	R		20	37.17	...		7	35.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
119	74 Tauri e	Nov. 24	R	4	20	37.17	...	71	7	37.6	...
		" 25	R		20	37.18	...		7	36.4	...
		Dec. 9	M		20	37.12	...		7	38.4	...
120	... ..	Dec. 23	R	4	21	58.85	...	80	28	12.0	10.2
121	1520 Lacaille	Dec. 12	M	4	26	39.85	3	147	29	8.1	8.7
122	57 Tauri a	Jan. 8	M	4	28	3.67	...	73	46	5.6	...
		" 9	M		28	3.63	...		46	10.9	...
		" 10	M		28	3.77	...		46	10.6	...
		" 14	M		28	3.86	...		46	9.8	...
		" 15	M		28	3.83	...		46	10.5	...
		" 16	M		28	3.69	...		46	10.3	...
		" 20	R		28	3.76	...		46	10.3	...
		Oct. 28	R		28	3.65	...		46	12.1	...
		Nov. 24	R		28	3.67	...		46	11.3	...
		Dec. 9	M		28	3.90	...		46	12.2	...
		" 19	R		28	3.64	...		46	11.4	...
123	... ..	Jan. 20	R	4	28	26.16	...	140	14	24.5	9.0
		Feb. 5	R		28	25.99	...		14	23.2	9.0
124	... ..	Jan. 21	R	4	31	41.44	5	142	59	40.9	9.5
		Dec. 17	R		31	41.10	6		59	44.2	9.3
125	... ..	Jan. 24	R	4	32	54.89	5	130	48	20.4	9.5
		Feb. 9	R		32	55.02	3		48	21.8	...
126	1566 Lacaille	Dec. 12	M	4	35	44.77	...	148	28	31.1	8.0
127	... ..	Nov. 26	R	4	36	15.67	5	64	19	22.1	9.5
		" 27	R		36	16.01	5		19	24.0	9.5
128	1663 Taylor	Jan. 19	R	4	36	48.54	3	138	48	16.4	8.0
129	... ..	Jan. 24	R	4	39	28.28	4	129	57	41.1	9.5
		Feb. 5	R		39	28.19	3		57	38.8	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1903.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
130	1598 Lacaille ...	Feb. 12	R	4	41	35.31	5	128	21	43.7	7.0
		Dec. 18	R		41	35.29	5		21	43.8	9.0
131	... ..	Jan. 23	R	4	43	18.87	5	130	41	18.3	9.3
		Dec. 17	R		43	18.57	...		41	21.0	9.7
132	97 Tauri : ...	Dec. 22	R	4	43	21.60	...	71	23	49.8	...
		" 23	R		43	21.66	...		23	49.6	...
133	1625 Lacaille... ..	Jan. 19	R	4	44	57.43	...	140	1	53.5	8.5
		" 21	R		44	57.40	...		1	54.5	8.0
134	... ..	Jan. 24	R	4	45	26.85	5	129	25	9.4	9.0
		Feb. 14	R		45	26.97	5		25	8.5	8.7
135	3 Aurigæ :	Jan. 16	M	4	48	4.44	...	57	3	16.8	...
		" 17	R		48	4.45	4		3	16.8	...
		Feb. 9	R		48	4.46	...		3	17.0	...
136	1761 Taylor	Jan. 22	R	4	49	57.63	...	129	16	43.8	7.5
137	7 Aurigæ e Var. 1 ...	Jan. 21	R	4	52	8.50	...	46	23	0.5	...
		Feb. 13	R		52	8.62	5		23	0.8	...
138	1780 Taylor	Jan. 20	R	4	52	16.45	...	144	38	52.0	9.0
139	... ..	Jan. 24	R	4	52	17.03	5	129	39	57.2	9.0
140	R Leporis Var. 1 ...	Jan. 6	M	4	53	21.99	6	105	0	54.1	6.0
		" 8	M		53	22.08	...		0	54.1	...
		" 9	M		53	22.26	...		0	54.8	...
		" 10	M		53	22.11	...		0	55.0	...
		" 15	M		53	22.17	...		0	53.9	6.5
141	102 Tauri :	Dec. 22	R	4	54	54.06	...	68	36	35.9	...
142	... ..	Jan. 23	R	4	55	54.58	...	130	17	47.1	9.0
		Feb. 12	R		55	54.44	...		17	46.0	9.2
		" 17	R		55	54.56	5		17	45.1	9.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude
				h.	m.	s.		°	'	"	
143	1811 Taylor ...	Jan. 22	R	4	57	1.08	5	129	55	8.7	6.5
144	1705 Lacaille ...	Feb. 14	R	4	57	23.66	...	129	16	37.2	8.1
	... ..	Dec. 12	M		57	23.50	...		16	38.0	8.0
145	2 Leporis e ...	Jan. 17	R	4	59	39.78	...	112	33	27.8	...
	... ..	" 19	R		59	39.64	...		33	26.9	...
	... ..	" 20	R		59	39.76	...		33	26.7	...
	... ..	" 21	R		59	39.69	5		33	26.0	...
	... ..	Feb. 9	R		59	39.82	5		33	27.3	...
	... ..	" 16	R		59	39.69	...		33	27.1	...
146	15 Orionis ...	Nov. 25	R	6	1	51.41	...	74	34	52.6	...
	... ..	" 26	R		1	51.55	...		34	53.1	...
147	... ..	Jan. 23	R	5	6	0.29	...	131	45	47.7	9.0
	... ..	Feb. 12	R		6	0.25	...		45	46.8	9.0
148	13 Aurigæ a ...	Feb. 14	R	5	6	34.36	...	44	8	28.4	...
149	... ..	Jan. 22	R	5	6	50.12	5	129	6	7.7	5.0
	... ..	Feb. 13	R		6	49.90	...		6	8.0	5.5
150	19 Orionis β ...	Jan. 15	M	6	7	57.11	...	93	21	45.8	...
	... ..	" 16	M		7	57.09	...		21	45.8	...
	... ..	" 29	R		7	57.33	...		21	46.8	...
	... ..	Dec. 23	R		7	57.30	...		21	50.3	...
151	... ..	Jan. 23	R	6	12	40.77	5	129	40	10.5	9.5
	... ..	Feb. 12	R		12	40.56	5		40	9.5	9.3
152	1822 Lacaille ...	Jan. 20	R	6	15	41.44	...	141	43	16.4	8.0
	... ..	Feb. 14	R		15	41.63	3		43	17.6	7.8
153	112 Tauri β ...	Jan. 9	M	5	17	38.04	...	61	30	44.9	...
	... ..	" 16	M		17	37.95	...		30	43.2	...
	... ..	" 21	R		17	37.94	...		30	44.1	...
	... ..	" 29	R		17	37.91	...		30	44.8	...
	... ..	" 30	R		17	37.95	...		30	44.4	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
153	112 Tauri β ...	Feb. 2	R	5	17	37.98	...	61	30	44.2	...
		" 5	R		17	37.89	...		30	43.7	...
154	... ..	Jan. 22	R	5	18	41.05	...	129	58	4.4	8.5
		Feb. 13	R		18	40.94	...		58	4.6	8.9
		Dec. 10	M		18	40.84	...		58	4.3	8.7
155	... ..	Jan. 23	R	5	19	43.42	...	131	3	57.6	9.5
156	34 Orionis δ Var. 1...	Jan. 14	M	5	25	0.39	...	90	24	13.5	...
		" 19	R		25	0.48	...		24	14.3	...
		" 20	R		25	0.58	...		24	14.0	...
		Feb. 14	R		25	0.58	5		24	14.5	...
		" 16	R		25	0.40	...		24	13.4	...
		" 18	R		25	0.54	...		24	14.2	...
		Nov. 27	R		25	0.48	...		24	14.2	...
157	11 Leporis α ...	Jan. 21	R	5	26	41.34	6	107	55	22.7	...
		" 22	R		26	41.34	...		55	22.6	...
		" 24	R		26	41.30	...		55	22.8	...
		Feb. 5	R		26	41.39	...		55	21.6	...
		" 17	R		26	41.36	...		55	22.0	...
158	46 Orionis ϵ ...	Jan. 19	R	5	29	15.81	5	91	17	33.5	...
		" 23	R		29	15.77	...		17	33.9	...
		Feb. 2	R		29	15.68	...		17	33.2	...
159	123 Tauri γ ...	Jan. 29	R	5	29	27.46	..	68	56	41.3	...
160	... ..	Feb. 4	R	5	31	35.77	5	128	42	15.9	...
		Dec. 10	M		31	35.73	...		42	17.8	9.1
		" 23	R		31	35.72	...		42	19.0	9.3
161	... ..	Feb. 3	R	5	32	39.88	...	128	41	17.4	9.0
		Dec. 23	R		32	39.82	4		41	18.4	9.3
162	— Columba α ...	Jan. 20	R	5	34	41.34	...	124	8	57.2	...
		" 22	R		34	41.39	...		8	57.5	...
		" 23	R		34	41.42	5		8	56.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
162	— Columbae α ...	Feb. 5	R	5	34	41.30	...	124	8	56.0	...
	... ..	" 18	R		34	41.40	...		8	57.4	..
163	2113 Taylor ...	Jan. 24	R	5	35	6.11	5	130	45	36.7	8.5
164	... ..	Feb. 17	R	5	36	41.64	...	129	57	52.4	9.2
165	... ..	Feb. 2	R	5	38	21.58	4	130	5	29.1	9.0
	... ..	" 4	R		38	21.73	5		5	26.4	...
166	1984 Lacaille ...	Jan. 24	R	5	40	39.94	5	130	15	21.1	7.5
	... ..	Feb. 3	R		40	39.80	...		15	20.6	8.0
167	54 Orionis χ^1 ...	Feb. 27	R	5	46	16.08	...	69	45	11.5	...
	... ..	Dec. 23	R		46	16.27	...		45	12.3	...
168	2036 Lacaille ...	Feb. 12	R	5	46	18.80	...	129	47	14.8	8.0
	... ..	Dec. 14	M		46	18.73	...		47	16.1	8.2
169	58 Orionis α Var. 2 ..	Jan. 16	R	5	47	45.37	...	62	37	19.1	...
	... ..	" 22	R		47	45.44	...		37	18.6	...
	... ..	" 23	R		47	45.30	...		37	18.1	...
	... ..	" 24	R		47	45.25	...		37	18.6	...
	... ..	" 30	R		47	45.31	...		37	17.9	...
	... ..	Feb. 2	R		47	45.29	...		37	18.3	...
	... ..	" 3	R		47	45.17	...		37	17.7	...
	... ..	" 5	R		47	45.27	...		37	18.4	...
	... ..	" 9	R		47	45.21	...		37	17.9	...
	... ..	" 10	R		47	45.33	...		37	18.0	...
	... ..	Nov. 26	R		47	45.36	...		37	19.6	...
	... ..	" 27	R		47	45.33	...		37	19.8	...
170	... ..	Feb. 13	R	5	49	34.77	...	130	1	20.5	9.4
171	... ..	Feb. 12	R	5	52	39.45	4	129	32	35.1	9.0
172	... ..	Jan. 24	R	5	53	14.62	...	131	7	13.1	8.0
	... ..	Feb. 4	R		53	14.76	...		7	13.0	..

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance 1863.			Magnitude.
				h.	m.	s.		°	'	"	
173	2104 Lacaille	Jan. 22	R	6	54	20.15	3	143	26	24.3	7.5
		Feb. 11	R		54	20.12	...		26	24.7	8.7
174	62 Orionis χ^4	Dec. 23	R	5	55	47.02	...	69	51	41.9	...
175		Jan. 30	R	5	56	7.44	...	129	57	13.8	9.6
		Feb. 3	R		56	7.50	6		57	11.7	9.0
176	2301 Taylor ...	Dec. 14	M	5	58	28.90	...	148	6	20.5	6.3
177		Feb. 13	R	5	59	38.82	...	129	49	48.7	8.2
		Nov. 26	R		59	39.02	6		49	47.0	...
178	67 Orionis ν ...	Jan. 14	M	5	59	44.93	...	75	13	6.4	...
		" 16	R		59	44.99	...		13	8.0	...
		" 22	R		59	44.94	6		13	7.7	...
		" 23	R		59	45.01	...		13	6.8	...
		" 24	R		59	44.99	...		13	7.3	...
		" 29	R		59	44.98	...		13	7.8	...
		Feb. 2	R		59	44.90	...		13	7.5	...
		" 9	R		59	45.00	...		13	6.0	...
		" 10	R		59	45.00	...		13	7.0	...
		" 16	R		59	45.00	...		13	8.5	...
		" 23	R		59	45.10	...		13	7.3	...
		Mar. 2	R		59	45.00	...		13	7.8	...
179		Feb. 17	R	6	3	37.31	...	129	58	10.8	8.8
		" 28	R		3	37.31	...		58	11.2	8.8
180		Feb. 11	R	6	4	20.19	5	128	2	33.8	7.0
		" 14	R		4	20.21	...		2	33.4	7.8
181	7 Geminorum γ ...	Jan. 30	R	6	6	36.46	...	67	27	26.4	...
		Nov. 26	R		6	36.39	...		27	26.5	...
		" 27	R		6	36.39	...		27	27.0	...
182		Jan. 24	R	6	8	47.70	5	131	54	43.4	9.0
		Feb. 4	R		8	47.74	...		54	42.5	...
183		Feb. 18	R	6	8	51.34	4	130	31	34.1	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
184	13 Geminorum μ ...	Jan. 16	R	6	14	40.58	...	67	25	11.5	...
		" 30	R		14	40.34	...		25	12.0	...
		Feb. 10	R		14	40.34	...		25	11.6	...
		" 12	R		14	40.34	...		25	12.1	...
		" 18	R		14	40.36	...		25	11.3	...
		" 28	R		14	40.44	5		25	11.3	...
		Nov. 26	R		14	40.27	..		25	12.1	...
185		Feb. 14	R	6	21	54.66	...	129	36	27.4	9.3
		" 28	R		21	54.46	6		36	27.6	9.5
186	2524 Taylor ...	Jan. 30	R	6	23	26.01	...	131	3	1.3	7.5
187	24 Geminorum γ ...	Jan. 16	R	6	29	47.90	...	73	29	14.3	...
		Feb. 10	R		29	47.77	...		29	14.4	...
		" 12	R		29	47.72	...		29	15.3	...
		" 14	R		29	47.84	...		29	14.6	...
		" 18	R		29	47.87	...		29	14.7	...
		" 21	R		29	47.77	...		29	14.8	...
		" 28	R		29	47.85	...		29	14.7	...
		Mar. 2	R		29	47.69	...		29	15.3	...
		" 3	M		29	47.81	...		29	15.3	...
		" 4	M		29	47.81	...		29	14.5	...
		" 5	M		29	47.80	...		29	14.6	...
		" 6	M		29	47.84	...		29	15.2	...
188		Jan. 17	R	6	31	24.41	5	140	0	10.4	9.0
		" 21	R		31	24.37	5		0	8.2	9.0
189		Jan. 30	R	6	33	51.92	6	130	54	15.0	9.0
		Feb. 4	R		33	51.92	...		54	13.5	9.0
190		Feb. 24	R	6	34	28.58	5	130	27	51.9	7.7
191	51 Cephei (Rev.) ...	Jan. 10	R	6	35	8.49	3	2	45	17.5	...
		" 20	R		35	8.75	3		45	16.7	...
		" 24	R		35	8.76	3		45	15.1	...
		Feb. 3	R		35	8.67	3		45	16.5	...
		" 9	R		35	8.13	3		45	16.6	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
191	51 Cephei (Her.) ...	Feb. 11	R	6	35	8.35	3	2	45	15.0	...
	... ..	" 17	R		35	8.88	3		45	15.5	...
	... ..	Mar. 3	R		35	8.90	2		45	17.3	...
192	... ..	Feb. 13	R	6	36	11.01	...	130	20	57.8	8.8
	... ..	" 14	R		36	11.15	3		20	57.0	9.0
193	31 Geminorum { ..	Feb. 27	R	6	37	35.84	...	76	57	35.9	...
	... ..	" 28	R		37	35.94	...		57	36.5	...
194	9 Canis Majoris a ...	Jan. 9	M	6	39	6.56	...	106	32	51.7	...
195	... ..	Feb. 24	R	6	42	21.57	...	130	56	51.6	8.8
	... ..	" 26	R		42	21.37	...		56	52.4	9.0
196	... ..	Jan. 21	R	6	43	38.73	...	128	30	20.3	9.0
	... ..	Feb. 4	R		43	38.63	...		30	18.9	8.5
197	2724 Taylor ...	Jan. 17	R	6	44	52.18	5	144	35	58.2	9.0
	... ..	Feb. 13	R		44	52.05	...		35	58.9	8.8
198	2500 Lacaille ...	Feb. 27	R	6	46	57.71	5	130	23	14.8	7.8
199	2516 Lacaille ...	Feb. 17	R	6	48	21.45	...	130	31	31.7	8.2
	... ..	" 23	R		48	21.00	5		31	34.4	...
200	... ..	Feb. 25	R	6	49	40.68	5	129	8	13.8	9.3
201	21 Canis Majoris e ...	Jan. 7	M		53	14.57	...	118	47	15.7	...
	... ..	" 20	R		53	14.50	...		47	17.0	...
	... ..	Feb. 3	R		53	14.46	...		47	15.8	...
	... ..	" 5	P		53	14.52	...		47	15.6	...
	... ..	" 13	R		53	14.61	...		47	15.3	...
	... ..	" 21	R		53	14.54	...		47	16.9	...
202	... ..	Feb. 24	R	6	53	45.82	...	129	47	27.6	9.0
203	2806 Taylor ...	Feb. 14	R	6	55	58.22	...	62	12	35.2	7.6
204	43 Geminorum { ...	Jan. 15	M	6	55	58.85	...	60	13	50.3	5.5

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
204	43 Geminorum 5 ...	Feb. 26	R	6	55	58.83	...	69	13	57.3	...
	... ..	" 27	R		55	58.85	...		13	56.5	...
	... ..	Nov. 27	R		55	58.89	...		13	56.8	...
206	23 Canis Majoris γ ...	Feb. 2	P	6	57	33.59	...	105	26	0.9	...
	... ..	" 11	R		57	33.63	5		25	59.8	...
	... ..	" 13	R		57	33.65	...		26	0.8	...
	... ..	" 17	R		57	33.66	...		25	59.7	...
	... ..	" 21	R		57	33.70	4		26	0.5	...
	... ..	Mar. 2	R		57	33.53	...		26	2.2	...
	... ..	" 13	M		57	33.63	...		26	0.0	...
206	R Geminorum Var. 2.	Jan. 17	R	6	59	6.24	...	66	5	20.0	8.0
	... ..	" 20	R		59	6.47	5		5	20.8	8.0
	... ..	Feb. 25	R		59	6.28	...		5	20.1	7.2
207	... ..	Jan. 16	R	6	59	8.11	5	66	59	50.1	9.0
208	... ..	Feb. 24	R	6	59	47.20	5	129	42	59.4	7.8
209	2851 Taylor	Mar. 11	M	7	0	48.71	...	145	44	43.8	7.8
210	R Canis Minoris Var. 1.	Jan. 21	R	7	1	10.41	...	79	45	46.7	8.7
	... ..	Feb. 14	R		1	10.39	4		45	46.2	7.9
	... ..	" 23	R		1	10.39	6		45	46.7	8.5
211	... ..	Mar. 16	M	7	4	55.62	5	130	42	26.1	9.0
212	2899 Taylor	Feb. 5	P	7	5	45.64	...	130	8	42.2	8.3
213	... ..	Feb. 27	R	7	5	49.02	5	129	23	7.9	9.0
214	... ..	Feb. 25	R	7	6	36.63	5	129	2	39.0	7.3
215	2696 Lacaille	Jan. 21	R	7	9	20.62	...	140	58	44.6	8.3
	... ..	Feb. 18	R		9	20.61	...		58	46.6	8.3
216	2940 Taylor	Jan. 23	R	7	9	26.25	...	129	57	35.9	8.5
217	64 Geminorum	Nov. 27	R	7	10	13.00	...	73	12	57.4	...

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Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No of Wires	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
218		Mar. 13	M	7	10	14.44	...	131	53	5.3	9.5
219	55 Geminorum J	Feb. 2	P	7	11	56.36	...	67	46	7.2	...
		" 3	R		11	56.31	...		46	7.3	...
		" 4	R		11	56.32	...		36	8.7	...
		" 11	R		11	56.25	...		46	8.3	...
		" 13	R		11	56.27	...		46	9.5	...
		" 17	R		11	56.35	...		46	9.1	...
		" 23	R		11	56.38	...		46	8.5	...
		" 24	R		11	56.30	...		46	8.3	...
		" 25	R		11	56.22	...		46	8.6	...
		" 26	R		11	56.33	...		46	9.2	...
		" 28	R		11	56.31	...		46	8.5	...
		Mar. 2	R		11	56.23	...		46	9.0	...
		" 3	M		11	56.28	...		46	8.7	...
		" 4	M		11	56.36	...		46	9.2	...
		" 5	M		11	56.31	...		46	9.3	...
		" 6	M		11	56.23	...		46	8.8	...
		" 19	M		11	56.39	...		46	9.0	...
220		Feb. 27	R	7	13	59.12	5	129	15	51.3	9.5
221		Mar. 14	M	7	14	28.97	...	138	49	29.4	8.0
222		Jan. 23	R	7	17	22.76	6	129	13	19.6	6.5
		Feb. 12	R		17	22.78	...		13	19.4	8.3
223		Feb. 23	R	7	18	1.93	4	129	42	29.6	9.6
		" 24	R		18	1.62	5		42	29.3	9.8
224	3043 Taylor	Feb. 26	R	7	19	11.32	5	129	16	19.5	6.8
		" 27	R		19	11.35	...		16	18.2	7.3
225	2507 Lacaille	Jan. 21	R	7	19	30.96	...	142	15	14.1	8.0
		Feb. 18	R		19	31.17	...		15	15.0	...
226		Mar. 17	M	7	19	33.48	...	123	7	52.1	9.0
227		Mar. 16	M	7	21	32.00	...	131	50	19.2	7.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
228	S Canis Minoris Var. 2.	Feb. 14	R	7	25	17 00	3	81	23	34.9	10.0
		" 23	R		25	16 84	4		23	33.9	9.5
		" 25	R		25	16 99	5		23	34.4	9.8
229	68 Geminorum ...	Jan. 23	R	7	25	47 25	...	73	52	54.5	6.5
		Feb. 28	R		25	47 21	...		52	54.9	...
230	66 Geminorum a ³ ...	Feb. 2	P	7	25	51 35	...	57	48	53.6	...
		" 5	P		25	51 44	...		48	52.6	...
		" 13	R		25	51 25	6		48	54.6	...
		" 17	R		25	51 23	...		48	53.3	...
		" 24	R		25	51 28	...		48	52.9	...
		" 26	R		25	51 15	...		48	53.9	...
		" 27	R		25	51 16	...		48	53.1	...
		Mar. 2	P		25	51 37	...		48	53.8	...
		" 6	M		25	51 24	...		48	55.0	...
		" 9	M		25	51 23	...		48	53.8	...
		" 18	M		25	51 19	...		48	55.3	...
		" 19	M		25	51 15	...		48	54.1	...
231		Jan. 19	R	7	26	2 73	5	142	5	45.3	9.0
232		Mar. 17	M	7	26	46 17	...	123	7	15.0	9.2
233	3126 Taylor ..	Jan. 21	R	7	29	32 74	...	143	15	35.0	7.5
234	10 Canis Minoris a ...	Jan. 7	M	7	32	7 61	...	84	25	35.9	...
		Feb. 4	R		32	7 50	...		25	38.4	...
		" 12	R		32	7 75	...		25	38.0	...
		" 24	R		32	7 73	...		25	37.0	...
		" 26	R		32	7 60	...		25	37.4	...
		" 27	R		32	7 73	...		25	36.3	...
		Mar. 3	M		32	7 72	...		25	37.3	...
		" 4	M		32	7 65	...		25	36.8	...
		" 5	M		32	7 67	...		25	37.7	...
		" 6	M		32	7 68	...		25	36.6	...
		" 9	M		32	7 65	...		25	37.0	...
		" 11	M		32	7 71	...		25	37.1	...
		" 12	M		32	7 66	...		25	38.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
234	10 Canis Minoris α ...	Jan. 18	M	7	32	7.72	...	84	25	37.4	...
	... ..	" 19	M		32	7.85	...		25	37.8	...
235	2493 Lalande ...	Jan. 15	M	7	32	41.06	...	121	49	18.1	8.0
236	2910 Lacaille ...	Jan. 19	R	7	33	16.04	3	143	62	47.6	8.6
237	... ..	Jan. 20	R	7	35	27.60	5	144	19	34.5	8.6
238	78 Geminorum β ...	Feb. 4	R	7	36	55.60	...	61	38	46.8	...
	... ..	" 5	P		36	55.94	...		38	46.1	...
	... ..	" 11	R		36	55.75	...		38	46.9	...
	... ..	" 25	R		36	55.72	...		38	46.8	...
	... ..	" 26	R		36	55.67	5		38	48.3	...
	... ..	" 27	R		36	55.74	...		38	46.7	...
	... ..	Mar. 2	P		36	55.63	...		38	47.7	...
	... ..	" 11	M		36	55.75	...		38	47.5	...
	... ..	" 12	M		36	55.69	...		38	47.9	...
	... ..	" 13	M		36	55.79	...		38	47.6	...
239	... ..	Jan. 23	R	7	37	44.52	...	128	62	45.1	8.0
	... ..	" 24	R		37	44.49	5		62	45.4	7.0
240	81 Geminorum γ ...	Feb. 2	S	7	38	11.35	...	71	0	33.3	...
	... ..	" 28	R		38	11.35	...		0	33.6	...
241	2971 Lacaille... ..	Jan. 19	R	7	40	16.90	4	143	64	47.6	7.5
242	T Geminorum Var. 4..	Jan. 16	R	7	41	4.50	...	65	55	40.1	8.7
	... ..	Feb. 23	R		41	4.50	...		55	41.3	7.8
243	... ..	Jan. 30	R	7	41	30.83	5	144	18	31.9	8.0
244	3013 Lacaille... ..	Jan. 21	R	7	43	27.42	3	142	0	32.0	7.0
245	49 R. P. L.	Feb. 4	R	7	43	39.63	3	5	33	32.7	...
246	... ..	Jan. 23	R	7	45	4.70	5	129	24	42.9	8.0
	... ..	Feb. 10	R		45	4.43	5		24	41.9	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
247	1701 Brisbane	... Jan. 20	R	7	46	17.14	...	144	24	30.2	8.0
248	3203 Taylor	... Jan. 19	R	7	46	29.16	5	144	43	55.7	8.0
249	... ..	... Feb. 26	R	7	48	56.74	...	130	25	52.8	9.1
250	1 Cancri	... Feb. 2	S	7	49	12.66	...	73	50	48.4	...
251	... ..	... Jan. 23	R	7	49	49.23	5	120	17	12.4	8.5
	... ..	... „ 24	R		49	49.14	5		17	13.4	8.5
252	... ..	... Feb. 18	R	7	50	2.96	3	120	28	16.1	...
253	3380 Taylor	... Jan. 20	R	7	51	48.84	...	144	16	45.2	8.0
254	... ..	... Jan. 19	R	7	52	52.87	...	144	41	30.7	9.0
255	6 Cancri	... Feb. 5	P	7	55	6.14	...	61	49	25.0	6.0
	... ..	... „ 14	R		55	5.90	5		49	29.4	...
	... ..	... „ 23	R		55	5.98	...		49	29.8	...
	... ..	... „ 24	R		55	6.00	...		49	29.3	...
	... ..	... „ 29	R		55	5.91	...		49	30.2	...
	... ..	... Mar. 2	P		55	6.17	...		49	30.8	...
	... ..	... „ 11	M		55	5.93	...		49	30.5	...
	... ..	... „ 14	M		55	5.96	...		49	30.1	...
	... ..	... „ 17	M		55	5.95	5		49	31.0	...
256	3373 Taylor	... Jan. 21	R	7	55	12.34	...	144	11	41.1	8.0
257	... ..	... Jan. 22	R	7	55	17.99	...	123	30	2.8	8.0
	... ..	... Feb. 10	R		55	17.93	6		30	0.6	...
258	... ..	... Jan. 23	R	7	56	29.34	...	120	21	9.1	9.5
259	15 Argus	... Feb. 11	R	8	1	42.63	...	113	54	41.2	...
	... ..	... „ 12	R		1	42.64	...		54	41.7	...
	... ..	... „ 14	R		1	42.67	...		54	41.4	...
	... ..	... Mar. 9	M		1	42.68	...		54	41.2	...
	... ..	... „ 12	M		1	42.71	...		54	42.2	...
	... ..	... „ 14	M		1	42.64	...		54	42.0	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
260	... ..	Mar. 13	M	8	1	59.94	...	113	46	37.3	9.7
261	... ..	Jan. 30	R	8	2	9.61	6	123	39	18.0	9.0
	... ..	Feb. 10	R		2	9.82	5		39	14.6	9.3
262	16 Cancri 3 ...	Jan. 6	M	8	4	20.91	...	71	56	29.8	...
263	... ..	Feb. 17	R	8	5	17.17	4	130	46	12.2	8.3
264	R Cancri Var. 1 ...	Jan. 16	R	8	9	0.44	...	77	51	22.1	8.0
	... ..	Feb. 5	P		9	0.85	...		51	20.4	7.0
	... ..	" 14	R		9	0.53	5		51	22.6	8.0
265	... ..	Mar. 28	R	8	9	20.80	4	74	15	52.6	9.4
	... ..	" 30	R		9	21.00	4		15	51.0	9.2
266	... ..	Mar. 17	M	8	9	51.05	...	74	16	2.7	9.3
267	16224 Lalande ...	Mar. 18	M	8	10	30.18	...	73	54	0.8	7.0
268	... ..	Feb. 13	R	8	12	15.14	...	128	43	30.2	8.3
269	... ..	Feb. 10	R	8	12	43.23	...	128	40	43.7	8.8
270	... ..	Feb. 18	R	8	12	53.61	5	131	17	1.7	9.3
271	... ..	Feb. 17	R	8	12	55.26	5	130	45	19.7	9.5
272	... ..	Mar. 16	M	8	13	40.21	...	133	17	7.4	9.5
273	20 Cancri d ¹ ...	Jan. 6	M	8	15	30.83	...	71	13	50.9	...
274	... ..	Jan. 16	R	9	17	21.94	...	141	15	41.3	9.0
275	3620 Taylor ...	Feb. 17	R	8	23	8.67	...	130	47	35.8	8.0
276	... ..	Feb. 10	R	8	23	30.10	5	128	38	23.2	8.6
	... ..	" 13	R		23	30.06	...		38	24.2	9.0
277	31 Cancri e ...	Mar. 2	P	8	23	47.14	...	71	26	44.0	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wire.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
278	33 Cancrī γ ...	Feb. 2	S	8	24	46.87	...	69	5	46.0	...
	... ..	" 3	R		24	46.93	...		5	44.8	...
	... ..	" 25	R		24	46.94	...		5	47.6	...
	... ..	Mar. 13	M		24	46.97	...		5	46.3	...
	... ..	" 14	M		24	47.00	...		5	46.4	...
	... ..	" 16	M		24	46.88	...		5	46.1	...
	... ..	" 18	M		24	47.04	...		5	47.4	...
	... ..	" 23	R		24	46.88	...		5	46.5	...
279	3651 Taylor ...	Feb. 18	R	8	25	37.47	...	130	3	8.0	7.7
280	... ..	Jan. 30	R	8	26	23.33	4	130	30	18.1	9.0
281	... ..	Feb. 10	R	8	30	11.64	3	128	46	55.0	8.5
	... ..	" 17	R		30	11.78	...		46	56.0	8.3
282	3710 Taylor ...	Mar. 11	M	8	31	22.50	...	141	20	51.9	8.0
293	... ..	Mar. 25	R	8	33	7.28	...	129	23	15.2	8.5
	... ..	" 26	R		33	7.25	...		23	14.8	8.8
284	S Cancrī Var. 2 ...	Jan. 16	R	8	36	6.46	4	70	28	32.4	10.0
	... ..	Feb. 11	R		36	6.26	5		28	32.6	8.0
	... ..	" 18	R		36	6.45	...		28	32.5	7.9
	... ..	Mar. 24	R		36	6.40	...		28	32.9	8.0
295	3767 Taylor ...	Mar. 4	M	8	36	18.39	...	140	50	2.8	8.5
286	47 Cancrī δ ...	Feb. 3	R	8	36	53.81	...	71	20	42.0	...
287	... ..	Mar. 6	M	8	37	48.60	5	136	5	19.7	8.9
288	11 Hydre ε ...	Feb. 5	M	8	39	31.05	...	83	4	52.0	...
	... ..	" 25	R		39	31.16	...		4	53.0	...
	... ..	Mar. 11	M		39	31.14	...		4	52.9	...
	... ..	" 14	M		39	31.06	...		4	51.6	...
	... ..	" 16	M		39	31.17	...		4	53.9	...
	... ..	" 17	M		39	31.07	...		4	53.3	...
	... ..	" 18	M		39	31.03	...		4	54.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		"	"	"	
298	11 Hydre e ...	Mar. 19	M	5	39	31.01	...	83	4	51.9	...
	... ..	" 20	R		39	31.11	...		4	50.7	...
	... ..	" 23	R		39	31.03	...		4	52.0	...
	... ..	" 25	R		39	31.08	...		4	51.6	...
	... ..	" 27	R		39	31.08	...		4	50.9	...
299	... ..	Mar. 26	R	8	40	27.06	...	129	15	20.6	8.3
300	60 R. P. L. ...	Feb. 27	R	8	46	9.40	3	5	16	43.0	...
	... ..	Mar. 5	M		46	7.50	3		16	41.2	...
	... ..	" 9	M		46	9.33	3		16	42.1	...
	... ..	" 18	M		46	9.20	3		16	41.6	...
	 s.p.	Sep. 14	M		46	8.80	2		16	40.2	...
	 s.p.	Oct. 6	M		46	8.70	2		16	41.0	...
301	S Hydre Var. 3 ...	Mar. 23	R	8	46	25.03	4	50	24	50.4	10.2
	... ..	" 24	R		46	25.27	5		24	50.7	10.2
	... ..	" 27	R		46	25.27	5		24	58.6	10.2
302	... ..	Mar. 13	M	8	47	18.74	...	69	36	57.0	9.6
303	3886 Taylor...	Mar. 6	M	8	48	12.00	...	136	52	39.3	8.0
304	T Cancri Var. 3 ...	Feb. 25	R	8	48	50.46	5	69	37	45.8	9.6
	... ..	Mar. 11	M		48	50.44	...		37	44.3	9.7
	... ..	" 26	R		48	50.42	...		37	45.1	9.0
305	T Hydre Var. 4 ...	Jan. 16	R	8	48	59.08	4	98	37	13.6	9.7
306	... ..	Mar. 16	M	8	49	11.22	...	132	54	6.3	7.5
307	66 Cancri e ...	Jan. 7	M	8	50	59.60	...	77	36	51.1	...
	... ..	Feb. 2	R		50	59.63	...		36	51.7	...
	... ..	Mar. 30	R		50	59.60	...		36	52.3	...
308	... ..	Mar. 14	M	8	51	52.56	...	137	24	27.1	9.7
309	... ..	Feb. 23	R	8	54	18.07	5	130	34	34.3	8.9
	... ..	Mar. 20	R		54	18.22	...		34	38.0	8.7

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
300		Apl. 9	M	8	54	55.91	...	142	48	42.8	9.0
301	3941 Taylor ...	Apl. 8	M	8	54	57.63	...	144	6	8.7	8.8
302		Apl. 10	M	8	56	35.61	5	146	45	47.0	9.3
303		Mar. 23	R	8	56	40.93	5	129	17	57.6	9.6
304		Jan. 16	R	8	59	4.56	...	145	37	55.2	9.0
305	76 Cancri α ...	Jan. 7	M	9	0	19.59	...	73	46	56.8	...
		Mar. 2	P		0	19.71	...		46	58.5	...
306		Apl. 11	M	9	1	2.20	...	150	1	16.2	8.0
307		Feb. 23	R	9	1	47.87	5	128	56	54.0	7.5
		Mar. 31	R		1	47.79	...		56	55.2	7.9
308		Mar. 24	R	9	2	15.40	3	71	26	18.3	10.5
309		Feb. 24	R	9	4	21.33	5	130	29	24.9	...
		" 23	R		4	21.60	...		29	24.8	9.3
310	3713 Lacaille	Apl. 13	M	9	4	32.87	...	143	48	57.5	7.8
311		Jan. 16	R	9	6	25.31	3	142	29	13.3	8.3
		Feb. 11	R		6	25.01	...		29	12.9	8.4
312		Mar. 4	M	9	6	28.79	...	138	41	16.6	8.9
313		Mar. 3	M	9	8	12.53	5	145	14	1.3	9.0
314		Feb. 25	R	9	9	21.50	2	73	52	23.0	10.2
		Mar. 24	R		9	21.55	3		52	26.3	10.3
315	83 Cancri ...	Feb. 2	S	9	11	19.96	6	71	42	58.6	...
		" 3	R		11	19.94	...		42	57.2	...
		" 5	M		11	19.76	...		42	56.6	...
		Mar. 2	P		11	20.08	...		42	59.4	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
315	53 Cancri ...	Mar. 9	M	9	11	19 72	...	70	42	57.9	...
		" 16	M		11	19 83	...		42	59.4	...
		" 17	M		11	19 79	5		42	58.3	...
		" 20	R		11	19 81	...		42	58.2	...
		" 23	R		11	19 80	...		42	58.7	...
		" 25	R		11	19 86	...		42	57.7	...
		" 28	R		11	19 85	...		42	58.3	...
		" 31	R		11	19 83	5		42	58.5	...
		Apl. 1	R		11	19 86	...		42	59.0	...
316		Feb. 23	R	9	11	40 21	5	130	44	53.2	...
317		Jan. 16	R	9	14	32 58	...	24	50	15.3	9.0
		Feb. 27	R		14	32 64	...		50	14.1	8.7
		" 28	R		14	32 63	5		50	13.0	8.9
318		Apl. 13	M	9	15	13 60	...	140	43	26.1	9.2
319		Feb. 11	R	9	15	49 53	5	25	4	10.3	9.0
		" 26	R		15	50 04	...		4	11.3	9.3
320		Mar. 5	M	9	16	3 09	...	140	7	19.9	9.0
321		Mar. 4	M	9	16	15 59	...	130	0	47.4	9.5
322	0681 O. A. N. ...	Mar. 13	M	9	17	32 56	...	25	3	29.2	9.3
323	30 Hydra a ...	Feb. 6	M	9	20	51 16	...	96	3	59.0	...
		Mar. 16	M		20	51 13	...		4	1.0	...
		" 17	M		20	51 39	...		4	0.3	...
		" 20	R		20	51 26	...		4	0.8	...
		" 24	R		20	51 21	...		3	59.9	...
		" 25	R		20	51 24	...		4	0.2	...
		" 26	R		20	51 24	...		4	0.8	...
		" 28	R		20	51 20	...		4	0.3	...
		" 30	R		20	51 29	...		4	0.2	...
		Apl. 1	R		20	51 31	...		3	59.4	...
		" 14	M		20	51 29	...		4	0.7	...
		" 15	M		20	51 38	...		4	59.8	...
		" 23	M		20	51 17	...		3	59.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observed.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
324	2 Leonis ω ...	Mar. 2	P	9	21	7.29	...	80	10	56.3	...
325	3853 Lacaille ...	Mar. 18	M	9	22	29.81	...	131	59	2.0	5.0
326	... ..	Feb. 26	R	9	24	30.40	...	130	25	54.2	9.0
	... ..	" 28	R		24	30.50	6		25	54.6	9.3
	... ..	Mar. 27	R		24	30.35	...		25	53.3	9.0
327	6 Leonis λ ...	Apr. 27	M	9	24	36.00	...	79	40	54.5	6.0
328	3886 Lacaille ...	Mar. 5	M	9	24	41.23	5	141	49	33.3	5.0
329	3887 Lacaille ...	Mar. 4	M	9	24	53.13	3	140	0	16.9	5.0
330	... ..	Mar. 6	M	9	26	53.60	...	144	57	51.3	9.0
331	... ..	Mar. 23	R	9	28	52.41	...	128	46	39.2	8.8
332	... ..	Mar. 24	R	9	28	58.85	...	128	49	16.2	8.0
333	10 Leonis ...	Feb. 3	R	9	29	58.38	...	82	33	6.0	...
	... ..	" 4	R		29	58.60	...		33	7.3	...
334	4259 Taylor ...	Mar. 7	M	9	31	55.83	...	133	44	31.9	5.0
335	... ..	Mar. 25	R	9	32	25.00	...	129	53	36.6	8.7
336	69 R. P. L. ... <i>s.p.</i>	Oct. 23	R	9	32	32.56	3	2	43	30.6	...
337	... ..	Feb. 26	R	9	32	51.36	3	129	47	14.2	8.2
338	14 Leonis ϵ ...	Jan. 7	M	9	33	50.38	...	79	29	9.7	...
	... ..	Feb. 3	R		33	50.19	5		29	10.7	...
	... ..	Mar. 30	R		33	50.34	...		29	10.5	...
	... ..	" 31	R		33	50.00	...		29	10.4	...
339	... ..	Feb. 24	R	9	34	41.56	...	130	34	22.9	...
340	4280 Taylor ...	Mar. 6	M	9	34	42.40	...	142	19	28.7	5.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number	Star	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
341	17 Leonis ϵ	Feb. 5	M	0	38	4.10	...	65	35	49.4	...
	...	" 6	M		38	4.31	...		35	49.0	...
	...	Mar. 20	R		38	4.08	...		35	49.5	...
	...	" 23	R		38	4.10	5		35	49.9	...
	...	" 24	R		38	4.10	...		35	49.0	...
	...	" 26	R		38	4.13	...		35	49.4	...
	...	" 27	R		38	4.16	...		35	48.0	...
	...	" 28	R		38	4.08	...		35	49.6	...
	...	Apl. 1	R		38	4.16	...		35	49.0	...
	...	" 9	M		38	4.21	...		35	49.4	...
	...	" 10	M		38	4.22	...		35	47.9	...
	...	" 11	M		38	4.23	...		35	48.7	...
342	R Leonis Var. 1	Feb. 26	R	9	40	11.25	5	77	56	16.5	9.0
	...	Mar. 11	M		40	11.14	6		56	15.8	9.2
	...	" 17	M		40	10.85	...		56	16.5	8.9
	...	" 25	R		40	11.20	...		56	16.2	7.9
	...	" 30	R		40	11.25	...		56	16.3	8.2
343	...	Feb. 24	R	0	42	39.64	5	130	47	31.0	8.0
344	...	Mar. 2	M	0	43	32.16	...	143	45	37.4	8.9
345	...	Mar. 12	M	0	44	3.77	...	147	1	19.8	8.0
346	...	Mar. 27	R	0	45	53.44	...	129	2	34.2	9.3
347	70 R. P. L.	Feb. 2	S	9	46	6.81	3	5	25	33.2	...
	...	Mar. 3	M		46	6.85	3		25	33.2	...
	...	Apl. 8	M		46	7.23	5		25	31.1	...
	...	" 10	M		46	7.71	3		25	30.8	...
	...	" 13	M		46	7.66	3		25	30.6	...
	...	" 15	M		46	8.14	3		25	32.9	...
348	4402 Taylor	Feb. 26	R	9	49	50.91	5	129	47	12.3	7.0
	...	Mar. 24	R		49	50.87	...		47	12.6	7.7
349	29 Leonis ν	Jan. 7	M	9	52	28.26	...	81	18	1.0	...
	...	Mar. 3	M		52	28.33	4		18	0.8	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
349	29 Leonis π ...	Mar. 4	M	9	52	58.33	...	81	18	0.3	...
		" 24	R		52	58.33	...		18	0.0	...
		" 27	R		52	58.29	...		17	59.9	...
		" 30	R		52	58.34	...		18	0.1	...
		Apl. 1	R		52	58.35	6		18	0.5	...
		" 9	M		52	58.23	...		17	59.8	...
		" 11	M		52	58.23	...		18	0.1	...
		" 13	M		52	58.27	...		18	0.5	...
		" 14	M		52	58.30	...		18	1.1	...
		" 27	M		52	58.31	...		17	59.4	...
		" 28	M		52	58.20	...		17	59.7	...
350	...	Mar. 12	M	9	55	49.57	...	147	23	57.7	8.0
351	...	Mar. 14	M	9	56	24.14	...	144	3	33.7	8.0
352	4476 Taylor ...	Mar. 5	M	9	57	48.75	...	145	35	45.6	8.9
353	31 Leonis A ...	Mar. 3	M	10	0	37.80	...	79	19	58.3	...
		" 4	M		0	37.84	...		19	57.9	...
354	32 Leonis α ...	Feb. 2	S	10	1	4.38	...	77	21	54.1	...
		" 6	M		1	4.24	...		21	52.1	...
		Mar. 7	M		1	4.30	...		21	52.0	...
		" 13	M		1	4.20	...		21	53.5	...
		" 24	R		1	4.39	...		21	53.0	...
		" 25	R		1	4.30	...		21	53.5	...
		" 26	R		1	4.38	...		21	54.2	...
		" 27	R		1	4.30	...		21	55.2	...
		" 28	R		1	4.38	5		21	54.0	...
		" 31	R		1	4.36	...		21	54.8	...
		Apl. 8	M		1	4.35	...		21	51.7	...
		" 9	M		1	4.32	...		21	53.4	...
		" 10	M		1	4.41	...		21	51.5	...
		" 11	M		1	4.32	...		21	52.7	...
		" 13	M		1	4.44	...		21	53.2	...
		" 14	M		1	4.38	...		21	53.6	...
		" 15	M		1	4.34	...		21	54.1	...
		" 27	M		1	4.23	...		21	51.7	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number	Star	Date of Observation	Observer.	Mean Right Ascension 1873.			No. of Wires	Mean Polar Distance 1903.			Magnitude
				A.	m.	s.		°	'	"	
354	32 Leonis α	Apr. 28	M	10	1	42.4	...	77	21	54.1	..
	" "	" 20	M		1	43.6	...		21	51.3	..
355	4538 Taylor	Mar. 26	R	10	0	6.78		129	19	7.2	
356	"	Mar. 17	M	13	8	50.19	...	139	51	23.4	9.0
357	72 R. P. L.	Mar. 12	M	10	9	10.65	3	5	3	21.8	
	"	Apr. 30	M		9	10.87	3		3	19.8	
	"	sp. Aug. 18	R		9	10.97	3		3	19.5	...
	"	sp. Nov. 2	M		9	10.67	3		3	19.6	
358	4577 Taylor	Mar. 27	R	10	9	45.10		128	36	35.7	9.0
	"	" 31	R		9	45.08	...		36	39.3	...
359	61 Leonis γ	Feb. 2	R	10	12	24.91	...	80	28	3.1	...
	"	Mar. 3	M		12	24.74			28	3.7	
	"	" 7	M		12	24.80	...		28	1.0	
	"	" 26	R		12	24.92			28	1.6	
	"	" 30	R		12	24.84	...		28	1.3	
	"	Apr. 1	R		12	24.95			28	2.2	
	"	" 8	M		12	24.85			28	0.2	
	"	" 9	M		12	24.93			28	1.4	
	"	" 10	M		12	24.82			28	1.4	
	"	" 11	M		12	24.91			28	1.4	
	"	" 13	M		12	24.79			28	1.5	
	"	" 14	M		12	24.84			28	2.2	
	"	" 15	M		12	24.87			28	0.3	
	"	" 29	M		12	24.87			27	59.5	...
360	"	Mar. 5	M	10	14	26.11		150	25	19.3	9.0
361	43 Leonis	Feb. 4	R	10	15	50.14	...	82	45	40.1	
	"	" 5	M		15	49.94	...		45	47.0	
362	"	Mar. 27	R	10	16	9.40	4	129	15	55.9	9.0
363	64 Leonis	Apr. 1	R	10	18	1.87	4	80	31	13.6	
364	"	Mar. 12	M	10	18	43.26	...	146	8	10.2	9.7

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				A.	m.	s.		°	'	"	
365		Mar. 3	M	10	21	50.24	...	146	54	34.8	8.9
366	47 Leonis ρ	Feb. 4	R	10	25	35.64	..	79	59	22.7	..
		" 5	M		25	35.40	..		59	25.0	...
		Mar. 2	M		25	35.77	...		59	23.3	...
		" 30	R		25	35.71	...		59	23.3	...
		" 31	R		25	35.60	...		59	22.7	...
		Apl. 1	P		25	35.81	..		59	24.2	...
		" 8	M		25	35.68	...		59	23.1	...
		" 10	M		25	35.67	...		59	20.5	...
		" 13	M		25	35.75	...		59	23.1	...
		" 15	M		25	35.67	...		59	22.6	...
		" 18	R		25	35.60	...		59	22.3	...
		May. 1	M		25	35.61	...		59	20.7	...
367		Mar. 12	M	10	29	10.39	...	147	53	17.9	9.5
368	4769 Taylor	Mar. 3	M	10	30	20.20	3	146	50	58.0	6.0
369	R Ursæ Majoris Var. 1.	Mar. 13	M	10	34	53.94	...	20	30	25.3	6.7
		" 17	M		34	54.27	5		30	27.0	6.7
		" 18	M		34	53.71	3		30	26.9	6.9
		" 19	M		34	54.32	...		30	25.4	6.8
		Apl. 17	R		34	53.83	3		30	22.0	8.0
370		Feb. 2	S	10	35	19.32	5	137	19	15.0	9.5
371		Mar. 9	M	10	38	44.67	...	144	50	1.4	8.0
372		Mar. 12	M	10	41	22.73	..	146	22	52.8	9.0
373	53 Leonis ι	Mar. 2	M	10	42	3.14	.	78	43	32.3	..
		" 31	R		42	3.24	...		43	51.0	..
		Apl. 8	M		42	3.79	...		43	51.3	..
		" 16	R		42	3.23	...		43	50.8	..
		" 17	R		42	3.22	5		43	51.4	..
		" 16	R		42	3.17	...		43	50.4	..
		" 28	M		42	3.17	...		43	53.0	..
		" 29	M		42	3.27	3		43	50.7	..

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
373	53 Leonis l	May 1	M	10	42	50.9	...	78	43	49.4	...
	... ..	" 6	M		42	50.4	...		43	50.7	...
	... ..	" 7	M		42	50.0	...		43	51.2	...
374	... ..	Mar. 6	M	10	42	54.28	...	141	4	7.1	9.0
375	... ..	Mar. 11	M	10	43	50.46	...	137	2	29.7	8.9
376	... ..	Apl. 15	M	10	46	0.31	...	141	39	32.0	7.8
377	... ..	Mar. 5	M	10	47	50.58	...	150	5	12.9	9.0
378	... ..	Mar. 18	M	10	47	50.36	...	129	28	53.1	9.0
379	4945 Taylor	Mar. 9	M	10	48	53.30	...	144	53	22.0	7.0
380	... ..	Mar. 14	M	10	50	13.00	...	144	30	10.0	8.0
381	4965 Taylor	Mar. 12	M	10	50	38.19	5	147	19	17.2	7.0
382	4969 Taylor	Feb. 6	M	10	52	16.76	5	143	35	55.0	9.0
383	... ..	Mar. 11	M	10	52	50.29	...	139	32	28.7	8.9
384	50 Leonis c	Mar. 4	M	10	53	38.48	...	83	9	47.6	...
	... ..	" 5	M		53	38.64	...		9	49.9	...
385	61 Leonis p'	Apl. 28	M	10	54	50.08	...	91	44	52.7	...
	... ..	" 29	M		54	50.28	...		44	51.7	5.5
386	... ..	Mar. 9	M	10	56	58.60	...	145	25	22.4	9.0
387	4576 Lacaille	Mar. 23	R	10	57	46.14	5	129	34	13.0	8.2
388	63 Leonis x	Mar. 7	M	10	57	50.91	...	81	55	20.6	...
	... ..	Apl. 1	P		57	57.10	6		55	20.2	...
	... ..	" 17	R		57	56.84	...		55	20.8	...
	... ..	" 18	R		57	56.91	4		55	20.8	...
	... ..	" 23	R		57	56.90	...		55	27.0	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance 1863.			Magnitude.
				h.	m.	s.		°	'	"	
388	63 Leonis χ	May 2	M	10	57	56.85	...	81	55	26.7	...
		" 9	M		57	56.84	...		55	24.6	...
		" 12	M		57	56.88	...		55	27.1	...
389		Mar. 6	M	10	53	9.40	5	140	55	54.6	9.5
390	65 Leonis p^2	Mar. 4	M	10	59	55.01	...	87	18	6.0	...
391		Mar. 12	M	11	0	34.00	...	147	13	24.6	9.5
392	5092 Taylor	Apl. 11	M	11	5	16.22	...	143	48	48.3	8.7
393	68 Leonis δ	Mar. 2	M	11	6	49.06	...	68	43	38.5	...
		Apl. 16	R		6	49.02	...		43	35.5	...
		" 23	R		6	49.09	...		43	35.6	...
		" 27	M		6	49.12	...		43	35.2	...
		" 30	M		6	49.11	...		43	34.7	...
		May. 1	M		6	48.96	...		43	33.9	...
		" 2	M		6	48.98	...		43	34.4	...
		" 6	M		6	49.02	...		43	33.5	...
		" 7	M		6	49.07	...		43	35.0	...
		" 12	M		6	49.05	...		43	34.3	...
		" 15	M		6	49.07	...		43	34.8	...
394		Apl. 9	M	11	7	4.51	3	145	39	55.0	8.5
395		Mar. 11	M	11	8	31.38	...	150	50	30.5	7.9
		" 23	R		8	31.28	5		50	32.6	8.5
396		Mar. 9	M	11	9	26.23	...	145	54	54.6	10.0
397		Mar. 12	M	11	9	36.60	...	147	10	54.2	9.0
398	74 Leonis ϕ	Feb. 5	M	11	9	41.54	...	92	54	13.0	...
		" 6	M		9	41.80	...		54	11.6	...
		Apl. 1	P		9	41.93	...		54	13.1	...
		" 28	M		9	41.66	...		54	11.9	...
399		Mar. 6	M	11	10	29.26	...	141	8	15.3	10.0

Separate Results of Madras Meridian Circle Observations in 1863.

No.	Star.	Date of Observation	Observer	Mean Right Ascension, 1863.			No. of Stars	Mean Polar Distance, 1863			Magnitude
				h.	m.	s.		°	'	"	
400		Mar. 20	R	11	11	54.2	5	127	34	2.2	...
401	12 Crateris & ...	Apl. 17	R	11	12	29.61	...	104	2	15.7	...
		" 18	R		12	29.61	...		2	14.8	...
		" 23	R		12	29.59	6		2	15.3	...
		" 27	M		12	29.64	...		2	15.1	...
		" 30	M		12	29.53	...		2	14.9	...
		May 1	M		12	29.59	...		2	14.3	...
		" 2	M		12	29.44	...		2	14.8	...
		" 4	M		12	29.55	...		2	14.8	...
		" 6	M		12	29.63	...		2	14.3	...
		" 7	M		12	29.71	...		2	15.0	...
		" 8	M		12	29.67	...		2	16.0	...
		" 9	M		12	29.63	...		2	14.9	...
		" 15	M		12	29.60	...		2	14.8	...
402		Mar. 26	R	11	12	45.72	...	129	31	48.6	7.8
403		Mar. 23	R	11	10	22.05	...	129	30	37.6	8.1
		" 26	R		10	22.17	...		30	37.3	8.2
404		Apl. 16	R	11	21	30.16	5	125	22	27.3	9.5
405		Mar. 19	M	11	22	45.20	...	145	53	23.6	9.0
406		Apl. 13	M	11	23	49.00	...	142	52	15.8	9.2
407	87 Leonis & ...	Feb. 5	M	11	23	18.73	...	92	14	53.9	...
		Mar. 5	M		23	18.67	...		14	54.2	...
		" 6	M		23	18.64	...		14	53.7	...
408		Mar. 13	M	11	23	18.88	...	23	20	51.6	10.0
		" 19	M		23	18.76	5		20	53.0	10.0
		Apl. 17	R		23	18.79	6		20	51.5	9.4
409		Mar. 23	R	11	24	26.12	5	23	17	15.0	9.9
		" 25	R		24	26.12	...		17	15.0	10.0
410		Mar. 3	M	11	24	49.26	...	149	15	22.7	8.6

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
411	91 Leonis ν	Mar. 6	M	11	29	56.07	...	90	4	4.9	..
		" 6	M		29	56.22	...		4	4.6	..
		Apl. 1	P		29	56.23	...		4	4.8	..
		" 16	R		29	56.08	...		4	4.5	..
		" 29	M		29	56.04	...		4	2.9	..
		" 30	M		29	56.01	...		4	3.9	...
		May 4	M		29	56.01	..		4	2.7	..
		" 6	M		29	56.03	...		4	3.3	..
		" 7	M		29	55.94	...		4	4.6	...
		" 8	M		29	56.03	...		4	5.5	..
		" 9	M		29	56.11	...		4	2.8	..
		" 11	M		29	56.07	...		4	4.0	..
		" 12	M		29	56.06	..		4	5.1	..
412		Mar. 14	M	11	32	6.37	5	144	14	11.0	8.0
413		Mar. 30	R	11	33	54.38	5	127	48	55.5	8.4
414		Apl. 11	M	11	34	17.41	...	144	20	21.7	7.9
415		Mar. 13	M	11	36	0.31	...	139	39	56.1	7.9
416	5384 Taylor	Feb. 5	M	11	36	59.90	5	151	43	47.3	6.0
417		Apl. 9	M	11	38	6.44	5	149	38	28.8	9.3
418		Mar. 26	R	11	38	39.13	5	129	33	41.2	9.2
		Apl. 17	R		38	39.00	..		33	42.9	9.1
419		Mar. 28	R	11	41	5.95	5	126	30	4.9	9.2
420		Mar. 24	R	11	41	9.27	..	129	31	45.2	8.3
		" 25	R		41	9.29	..		31	44.1	8.3
421	94 Leonis β	Apl. 23	R	11	42	4.21	5	74	39	43.4	..
		May 4	M		42	4.12	..		39	46.6	..
		" 8	M		42	4.19	5		39	43.4	..
		" 11	M		42	4.09	..		39	45.4	..
		" 12	M		42	4.21	..		39	45.0	..
		" 15	M		42	4.19	..		39	43.6	..

Separate Results of Madras Meridian Circle Observations in 1863.

No.	Star	Date of Observation	Observer	Mean Right Ascension 1863.			No. of Wires	Mean Polar Distance 1863.			Magnitude.
				A	m.	s		°	'	"	
422		Apl. 10	M	11	43	57.22	..	143	44	54.7	9.3
423	5427 Taylor	Feb. 6	M	11	44	2.10	—	94	34	18.4	6.0
	"	Apl. 29	M		44	2.07	..		34	17.5	6.0
	"	" 30	M		44	1.01	..		34	18.5	6.0
424		Mar. 30	R	11	44	41.15	...	120	2	19.6	8.2
425	5433 Taylor	Mar. 23	R	11	44	48.42	...	120	32	41.1	7.7
	"	" 27	R		44	48.30	...		32	40.5	7.4
426		Apl. 13	M	11	45	48.58	...	142	30	41.1	9.4
427		Mar. 28	R	11	49	53.03	5	128	5	8.2	..
428		Mar. 30	R	11	51	20.73	5	128	53	12.0	8.7
429		Apl. 14	M	11	51	23.00	..	144	12	35.9	9.0
430		Mar. 23	R	11	53	47.10	5	129	35	29.0	9.7
	"	" 27	R		53	47.13	5		35	29.0	9.7
431		May 16	R	11	56	20.43	5	128	29	27.2	9.0
432	5534 Taylor	Apl. 10	M	11	56	46.47	...	143	56	50.0	8.0
433	4566 Lacaille	Apl. 15	M	11	56	51.02	..	142	44	6.0	7.3
434	89 R P. I.	Mar. 20	R	11	57	48.27	3	3	30	13.0	..
	"	" 24	R		57	48.23	3		30	13.3	..
	"	" 25	R		57	48.05	3		30	14.7	..
	"	" 28	R		57	48.16	3		30	15.0	..
	"	" 31	R		57	47.95	3		30	15.0	..
	"	Apl. 23	R		57	48.30	3		30	13.0	..
	"	May 3	M		57	48.24	3		30	12.0	..
	"	Oct. 31	R		57	48.36	3		30	11.3	..
	"	Nov. 4	M		57	48.15	5		30	12.0	..
	"	" 14	M		57	47.56	3		30	10.0	..
435		Mar. 30	R	11	58	57.23	..	128	27	20.9	8.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
436	... ..	Apl. 14	M	11	59	41.35	...	144	15	51.2	8.0
437	... ..	Mar. 27	R	12	1	33.96	5	139	1	14.1	9.0
438	5041 Lacaille	Apl. 9	M	12	2	29.66	...	141	22	52.4	8.2
439	... ..	Feb. 6	M	12	2	34.21	3	141	5	17.7	9.5
440	2 Corvi	Apl. 16	R	12	3	5.01	...	111	51	26.7	...
	... ..	May 8	M		3	4.95	..		51	28.5	...
	... ..	" 9	M		3	4.95	...		51	28.1	..
	... ..	" 11	M		3	4.92	..		51	29.1	..
	... ..	" 16	R		3	4.96	5		51	27.6	..
441	... ..	Apl. 11	M	12	3	35.27	...	145	56	44.2	9.0
442	... ..	Apl. 28	M	12	5	44.87	5	134	7	45.7	8.0
443	... ..	Mar. 25	R	12	5	59.86	5	130	10	45.5	9.5
444	... ..	Apl. 13	M	12	6	9.37	...	138	27	11.7	8.0
445	... ..	Apl. 15	M	12	6	26.01	5	142	50	19.4	9.4
446	5613 Taylor	Mar. 31	R	12	7	52.61	...	130	22	28.7	7.2
447	69 Ursæ Majoris	Mar. 27	R	12	8	37.87	...	32	12	23.3	...
	... ..	" 30	R		8	37.84	...		12	21.5	..
	... ..	Apl. 10	M		8	38.04	...		12	21.6	...
448	... ..	Apl. 14	M	12	8	46.05	...	144	19	53.0	8.0
449	15 Virginis	Apl. 30	M	12	12	53.87	...	89	54	19.1	...
	... ..	May 15	M		12	53.78	..		54	19.3	..
	... ..	" 16	R		12	53.85	...		54	19.0	...
	... ..	" 18	R		12	53.79	...		54	19.6	...
450	... ..	Apl. 9	M	12	14	0.35	...	143	44	28.3	9.6
451	5119 Lacaille	Mar. 6	M	12	15	18.61	5	138	33	54.9	9.0

Separate Results of Madras Meridian Circle Observations in 1863.

Number	Star	Date of Observation.	Observer	Mean Right Ascension 1863			No of Wires	Mean Polar Distance 1863			Magnitude.
				A.	m.	s.		"	"	"	
452	...	Apl. 8	M	12	15	48.74	...	141	30	27.5	8.5
453	...	Apl. 11	M	12	16	42.61	...	147	9	26.1	8.9
454	...	Apl. 15	M	12	18	35.77	...	143	29	47.8	10.0
455	...	Mar. 27	R	12	18	57.33	5	129	43	26.9	9.3
456	...	Mar. 17	M	12	18	59.97	5	147	20	50.3	7.8
457	...	Apl. 13	M	12	19	13.96	...	144	5	50.2	7.9
458	...	Apl. 28	M	12	19	49.79	...	124	12	47.8	8.5
459	...	Apl. 14	M	12	20	42.62	...	141	18	58.0	7.8
460	5725 Taylor ..	Mar. 7	M	12	21	6.95	...	145	38	27.1	7.0
461	21 Virginis η ...	Apl. 10	M	12	26	42.47	...	98	41	45.0	5.5
	... ..	" 11	M		26	42.49	...		41	45.4	5.5
462	9 Corvi β ...	Apl. 1	M	12	27	11.50	...	112	38	20.3	...
	... ..	May 11	M		27	11.73	...		38	20.1	...
	... ..	" 18	R		27	11.65	...		38	19.6	...
	... ..	June 1	M		27	11.68	...		38	18.7	...
	... ..	" 9	M		27	11.79	...		38	20.0	...
463	...	Apl. 14	M	12	27	46.22	...	140	55	11.3	9.0
464	...	Apl. 13	M	12	30	47.53	...	142	19	22.4	9.0
465	R Virginis Var. 2 ...	Apl. 23	R	12	31	32.80	...	82	15	27.7	8.8
	... ..	May 4	M		31	32.81	...		15	27.3	9.2
	... ..	" 7	M		31	32.74	...		15	27.3	9.2
466	...	May 21	R	12	31	48.30	5	84	30	11.7	9.2
467	26 Virginis χ ...	Mar. 6	M	12	32	10.66	...	97	14	29.5	...
	... ..	" 7	M		32	10.63	...		14	27.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.	
				h.	m.	s.		°	'	"		
467	26 Virginis χ	...	Apl. 30	M	12	32	10.73	...	97	14	27.7	5.0
	...	...	May 1	M		32	10.52	...		14	26.2	5.0
	...	...	" 28	R		32	10.65	5		14	28.3	...
468	...	...	Apl. 15	M	12	32	46.05	...	143	7	21	9.0
469	...	...	Apl. 9	M	12	33	43.61	...	145	23	10.0	8.9
470	5850 Taylor	...	Apl. 8	M	12	34	23.55	...	144	0	34.5	7.5
471	29 Virginis γ^1	...	May 26	R	12	34	43.09	...	90	41	49.0	...
472	S Ursæ Majoris Var. 2.	...	May 20	R	12	37	54.71	3	28	9	19.6	8.5
473	5863 Taylor...	...	Apl. 11	M	12	38	18.48	...	143	51	43.8	7.5
474	...	...	Apl. 13	M	12	41	36.48	...	141	49	14.8	8.8
475	...	...	Apl. 9	M	12	42	20.72	...	147	15	24.6	9.0
476	...	...	Apl. 15	M	12	42	44.02	...	142	51	35.5	8.9
477	...	...	Apl. 14	M	12	42	47.52	...	139	24	55.7	9.0
478	...	...	Apl. 16	R	12	43	13.93	5	129	7	30.6	8.9
479	40 Virginis ψ	...	Mar. 6	M	12	47	14.00	...	98	47	39.0	...
	...	...	Apl. 30	M		47	13.84	...		47	38.5	5.0
480	99 R. P. L.	...	May 26	R	12	48	10.25	2	5	50	34.5	...
	...	s.p.	Oct. 17	R		48	9.91	2		50	33.6	...
481	...	...	Apl. 8	M	12	49	20.13	...	145	23	53.6	8.9
482	12 Can. Ven. α	...	May 16	R	12	49	36.74	...	50	56	29.0	...
	...	...	" 19	R		49	36.77	...		56	28.9	...
	...	...	" 20	R		49	36.77	...		56	28.2	...
	...	...	" 21	R		49	36.75	5		56	29.8	...
	...	...	" 27	R		49	36.79	...		56	28.8	...

Separate Results of Madras Meridian Circle Observations in 1863.

No.	Star	Date of Observation.	Observer.	Mean Right Ascension 1863			No of Wires	Mean Polar Distance 1863.			Remarks
				A.	m.	s.		°	'	"	
483	5711 Taylor ...	Apl. 9	M	12	51	50.95	...	143	28	16.2	89
484	... ..	Apl. 10	M	12	53	4.14	5	142	23	43.4	89
	... ..	" 13	M		53	4.40	..		23	41.1	79
485	... ..	Apl. 27	M	12	53	22.37	...	135	44	7.9	80
486	... ..	Apl. 14	M	12	54	31.52	..	139	18	3.3	92
487	... ..	Apl. 29	M	12	56	56.17	...	123	24	51.4	83
488	5351 Lacaille ...	Apl. 23	R	12	57	4.42	...	129	56	47.9	78
489	51 Virginia θ... ..	Apl. 1	M	13	2	51.29	...	94	48	26.1	...
	... ..	May 20	R		2	51.60	...		48	24.3	...
	... ..	" 26	R		2	51.56	...		48	24.4	...
	... ..	" 27	R		2	51.49	...		48	25.2	...
	... ..	" 30	R		2	51.45	...		48	24.8	...
490	6057 Taylor	Mar. 7	M	13	3	43.63	...	149	11	25.0	60
491	... ..	Apl. 15	M	13	4	28.48	5	138	10	13.4	92
492	... ..	Apl. 11	M	13	4	32.00	...	143	12	0.9	98
493	... ..	Apl. 29	M	13	5	33.90	...	124	16	11.8	89
494	W Virginia Var. 1 ...	May 21	R	13	6	51.05	...	105	49	35.5	88
	... ..	" 23	R		6	51.03	...		49	31.7	...
495	... ..	Apl. 14	M	13	7	35.75	...	139	45	53.0	90
496	... ..	Apl. 23	R	13	9	43.08	6	129	55	57.0	87
497	58 Virginia	May 28	R	13	10	16.63	...	90	49	23.5	...
	... ..	" 29	R		10	16.62	...		49	23.6	...
498	6120 Taylor	May 16	R	13	12	9.65	...	130	28	12.3	74
499	... ..	May 1	M	13	12	49.63	...	122	56	14.5	79

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
500	5503 Lacaille	May 20	R	13	14	55.50	5	125	23	32.1	8.0
501	...	Apl. 11	M	13	15	43.91	...	145	12	31.9	9.0
502	67 Virginia a...	Mar. 7	M	13	17	58.68	...	100	26	42.9	...
	...	May 1	M		17	58.61	...		26	41.2	...
	...	" 2	M		17	58.58	...		26	42.4	...
	...	" 5	M		17	58.62	...		26	43.2	...
	...	" 16	R		17	58.70	...		26	43.2	...
	...	" 28	R		17	58.76	...		26	42.5	...
	...	June 1	M		17	58.69	...		26	42.5	...
	...	" 3	M		17	58.80	...		26	42.2	...
	...	" 5	M		17	58.64	...		26	42.6	...
503	12872 O. A. S.	May 6	M	13	19	17.48	...	116	56	5.0	10.2
504	5546 Lacaille	Apl. 14	M	13	19	37.46	...	143	27	0.0	9.0
505	103 R. P. L. ... s.p.	Dec. 7	M	13	20	18.58	5	4	31	44.6	...
506	R Hydræ Var. 1	Apl. 15	M	13	22	13.96	...	112	34	20.4	6.7
	...	" 16	R		22	13.87	...		34	19.8	...
	...	" 20	M		22	13.90	...		34	18.8	6.8
	...	May 7	M		22	13.82	...		34	19.5	7.0
507	76 Virginia A...	Mar. 7	M	13	25	45.32	...	100	27	30.5	...
	...	May 1	M		25	45.23	...		27	28.7	5.0
	...	" 2	M		25	45.39	...		27	29.6	...
508	S Virginia Var. 6	Apl. 13	M	13	25	50.90	...	96	29	22.8	7.5
	...	" 14	M		25	50.83	...		29	21.3	7.6
	...	" 23	R		25	50.90	...		29	22.8	7.1
	...	May 5	M		25	50.81	...		29	21.7	7.5
509	79 Virginia 3	Apl. 1	M	13	27	42.43	...	89	53	40.4	...
	...	May 18	R		27	42.81	...		53	40.7	...
	...	" 19	R		27	42.93	...		53	40.1	...
	...	" 20	R		27	42.85	...		53	39.2	...
	...	" 21	R		27	42.83	...		53	39.5	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension 1863.			No of Wires	Mean Polar Distance 1863.			Magnitude.
				h.	m.	s.		°	'	"	
599	79 Virginia 5	May 23	R	13	27	42.02	...	60	53	29.5	...
		" 26	R		27	42.80	...		53	40.7	...
		" 27	R		27	43.83	...		53	29.6	...
		June 1	M		27	42.70	...		53	38.7	...
		" 2	M		27	42.77	...		53	38.0	...
		" 5	M		27	42.99	...		53	40.0	...
		" 10	M		27	42.76	...		53	40.7	...
510	...	Apr. 17	R	13	32	51.55	5	129	1	18.1	7.8
511	6363 Taylor ...	Apr. 15	M	13	36	24.58	5	147	33	9.7	8.0
512	...	May 28	R	13	27	27.78	...	128	29	58.8	9.0
513	...	May 7	M	13	38	10.39	5	122	46	41.4	8.8
514	...	May 21	R	13	40	26.82	5	129	21	43.2	9.3
515	25423 Lalande ..	Apr. 23	R	13	42	15.15	...	64	57	27.9	9.5
		" 29	M		42	15.27	...		57	25.8	9.0
		May 4	M		42	15.06	...		57	25.7	9.3
516	80 Virginia ..	May 29	R	13	43	25.83	5	107	27	1.1	...
		" 30	R		42	25.80	...		27	0.2	...
517	...	May 8	M	13	43	10.81	...	123	5	14.3	8.3
518	...	May 20	R	13	44	11.61	...	127	50	20.1	9.0
519	...	May 28	R	13	45	19.45	...	128	22	47.0	9.7
520	...	Apr. 30	M	13	45	39.05	...	122	54	12.2	8.5
		May 1	M		45	38.83	...		54	15.7	8.0
521	8 Bootis 4 ...	May 5	M	13	48	9.00	5	70	51	51.6	...
		" 19	R		48	9.00	...		51	52.8	...
		" 21	R		48	9.02	...		51	51.7	...
		" 22	R		48	9.03	...		51	51.7	...
		June 1	M		48	9.58	...		51	51.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
521	8 Bootis η	June 2	M	13	48	9.68	...	70	54	52.4	...
	... ..	" 3	M		48	9.61	..		54	52.0	...
	... ..	" 5	M		48	9.65	5		54	52.6	...
	... ..	" 11	M		48	9.65	5		54	50.6	...
522	.. ..	May 7	M	13	50	37.00	...	123	43	37.5	8.0
523	25759 Lalande .	Apl. 29	M	13	54	39.29	...	67	21	29.4	7.5
	... ..	May 1	M		54	39.29	...		21	28.3	7.5
	... ..	" 6	M		54	39.28	...		21	29.6	7.5
	... ..	" 20	R		54	39.03	5		21	29.9	8.0
	... ..	" 27	R		54	39.30	.		21	30.9	...
524	93 Virginia τ	May 28	R	13	54	40.54	..	87	47	27.8	...
	... ..	" 29	R		54	40.54	...		47	27.8	...
	... ..	June 2	M		54	40.52	3		47	26.8	...
	... ..	" 3	M		54	40.49	...		47	26.8	...
	... ..	" 5	M		54	40.45	...		47	26.7	...
525	25896 Lalande	Apl. 29	M	13	59	51.57	3	67	10	36.2	7.5
	... ..	May 2	M		59	51.42	...		10	37.4	7.5
	... ..	" 4	M		59	51.46	...		10	35.0	7.5
	... ..	" 6	M		59	51.46	..		10	34.5	7.5
526	6585 Taylor	May 8	M	14	1	18.94	..	124	13	46.7	7.8
527	... ..	May 30	R	14	2	22.30	...	129	3	58.4	...
528	108 R. P. L.	May 19	R	14	4	4.35	3	3	35	11.3	...
	 s.p.	Nov. 9	M		4	4.13	3		35	11.2	...
529	U Bootis Var. 4	May 27	R	14	4	18.65	...	79	32	14.1	9.7
530	6616 Taylor	Apl. 30	M	14	5	26.28	—	146	26	31.8	...
531	... ..	May 7	M	14	6	5.20	5	135	1	0.6	8.0
532	16 Bootis α	May 26	R	14	9	24.80	—	70	6	11.2	...
	... ..	June 9	M		9	24.72	—		6	12.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

No.	Star	Date of Observation	Observer	Mean Right Ascension 1863.			No. of Wires	Mean Polar Distance 1863.			Magnitude
				A.	m.	s.		"	"	"	
532	16 Bootis α	June 10	M	14	9	24.70	—	70	6	12.0	—
	...	" 11	M		9	24.74	—		6	10.6	—
	...	" 18	R		9	24.84	—		6	11.5	—
533	100 Virginia A	Apl. 28	M	14	11	41.00	—	102	44	18.6	—
	...	May 2	M		11	41.83	—		44	19.1	—
	...	June 27	R		11	42.01	—		44	19.4	—
534	...	May 8	M	14	12	26.80	5	136	40	32.4	9.3
535	...	Apl. 30	M	14	14	30.00	3	122	35	29.6	8.9
536	...	May 9	M	14	15	15.00	—	122	11	18.7	—
537	6709 Taylor	May 7	M	14	15	55.15	6	119	3	2.1	7.0
538	..	May 1	M	14	17	21.04	—	123	13	6.2	9.9
539	6740 Taylor	Apl. 20	M	14	19	1.39	—	133	42	28.0	7.6
540	..	Apl. 30	M	14	21	53.94	—	122	32	43.7	8.7
541	5932 Lacaille	May 18	R	14	22	38.49	5	120	46	28.6	8.0
542	..	May 8	M	14	23	38.67	5	136	54	8.5	8.0
543	...	May 4	M	14	24	9.13	—	123	48	17.8	8.0
544	25 Bootis ρ	May 20	R	14	25	55.47	—	80	1	32.7	—
	...	" 22	R		25	55.55	—		1	33.4	—
	...	June 2	M		25	55.60	—		1	33.1	—
	...	" 3	M		25	55.51	—		1	32.7	—
	...	" 9	M		25	55.37	—		1	35.4	—
	...	" 18	R		25	55.48	6		1	33.7	—
545	...	May 1	M	14	26	40.04	—	123	19	45.2	9.5
546	...	May 15	M	14	29	23.02	—	124	55	12.4	7.8
547	6027 Lacaille	Apl. 30	M	14	31	0.03	5	122	47	2.2	7.7

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1863.			No. of Wires.	Mean Polar Distance, 1863.			Magnitude.
				h.	m.	s.		°	'	"	
548	R Bootis Var. 1	May 16	R	14	31	9.03	...	62	40	3.0	7.4
	... ..	" 18	R		31	9.00	...		40	3.3	...
	... ..	" 27	R		31	9.02	...		40	3.0	9.0
549	... ..	May 7	M	14	32	35.73	..	121	44	2.6	7.6
550	6848 Taylor	May 8	M	14	32	44.22	..	136	41	2.4	7.7
551	5 Libra	May 11	M	14	38	24.82	...	104	52	48.4	...
552	36 Bootis	May 22	R	14	39	0.12	...	62	20	45.0	...
	... ..	" 28	R		39	0.08	..		20	47.7	...
	... ..	June 9	M		39	0.16	5		20	48.9	...
	... ..	" 10	M		39	0.23	...		20	48.0	...
	... ..	" 18	R		39	0.05	..		20	48.1	...
553	... ..	May 15	M	14	39	16.66	..	124	9	20.8	7.7
554	27022 Lalande	May 4	M	14	43	10.44	...	78	56	9.3	7.6
	... ..	" 5	M		43	10.44	..		56	9.7	7.0
	... ..	" 6	M		43	10.44	..		56	8.9	7.6
	... ..	" 18	R		43	10.41	...		56	10.4	...
555	9 Libra α ²	Apl. 1	M	14	43	18.11	5	106	28	13.0	...
	... ..	May 2	M		43	18.15	...		28	13.2	...
	... ..	June 20	R		43	18.14	..		28	13.2	...
	... ..	July 10	M		43	18.21	...		28	12.0	...
556	27123 Lalande	May 7	M	14	47	19.89	...	109	27	7.4	7.8
	... ..	" 8	M		47	20.04	..		27	7.6	7.8
	... ..	" 9	M		47	20.02	..		27	8.9	...
	... ..	" 27	R		47	20.09	..		27	7.9	9.0
557	... ..	May 13	M	14	51	31.68	5	123	12	29.6	8.9
558	... ..	May 8	M	14	57	38.39	...	131	20	27.2	8.3
559	43 Bootis	May 29	R	14	58	34.52	5	62	31	0.1	...
	... ..	June 10	M		58	34.58	...		30	39.2	...

Summary Result of Madras Meridian Circle Observations in 1863.

No.	Star	Date of Observation	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance 1863.			Magnitude
				h.	m.	s.		°	'	"	
548	13 Boreas δ ...	June 11	M	14	58	34.54	...	62	30	59.8	...
	... ..	July 10	M		58	34.45	...		30	59.4	...
	... ..	" 11	M		58	34.53	...		30	58.6	...
549	7079 Taylor ...	May 11	M	15	3	16.26	...	123	7	1.1	...
551	... ..	May 15	M	15	3	30.06	...	122	15	27.9	8.5
552	24 Libra α^1 ...	May 4	M	15	4	25.09	...	109	16	14.3	5.6
	... ..	" 30	R		4	25.03	...		16	14.6	...
553	111 R. P. L. ...	May 9	M	15	5	51.04	5	5	31	9.1	...
	... ..	Dec. 12	M		5	51.16	3		31	8.0	...
554	... ..	May 27	R	15	6	39.40	5	130	26	10.4	8.0
555	27 Libra β ...	May 23	R	15	9	38.57	...	98	53	30.6	...
	... ..	" 29	R		9	38.26	...		52	30.0	...
	... ..	June 11	M		9	38.32	...		52	29.9	...
	... ..	" 20	R		9	38.26	4		52	31.2	...
	... ..	" 26	R		9	38.19	...		52	30.0	...
	... ..	" 27	R		9	38.17	...		52	29.0	...
556	... ..	May 21	R	15	11	47.26	...	130	23	46.9	9.3
557	... ..	May 15	M	15	14	8.23	...	123	7	17.9	9.2
558	8 Serpens Var. 3 ...	May 27	R	15	15	14.94	4	75	11	28.9	10.3
559	... ..	May 20	R	15	20	19.71	...	130	8	21.5	9.0
560	32 Libra γ^1 ...	May 11	M	15	20	22.04	...	106	14	11.0	...
	... ..	" 30	R		20	22.11	...		14	9.4	...
561	... ..	May 28	R	15	21	27.09	...	129	25	47.1	9.0
562	7120 Taylor ...	June 3	M	15	22	2.63	...	123	6	29.8	7.9
563	114 R. P. L. ...	Dec 15	M	15	22	23.08	3	2	14	49.8	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
574	7240 Taylor ...	May 21	R	15	24	20.21	...	130	1	16.1	7.8
575	... ..	May 15	M	15	24	56.73	...	122	43	24.4	7.0
576	5 Coronæ Borealis α...	May 23	R	15	28	53.12	...	62	49	21.2	...
	... ..	June 27	R		28	53.23	5		49	20.2	...
	... ..	July 10	M		28	53.33	...		49	19.2	...
577	... ..	May 20	R	15	28	55.03	...	119	38	51.9	8.8
578	... ..	May 28	R	15	30	6.00	...	129	33	14.7	9.3
579	43 Libræ κ ...	May 4	M	15	31	3.55	...	109	13	54.7	5.0
580	... ..	May 18	R	15	31	46.79	...	129	1	16.1	8.3
581	XV. 704 W. B. E. ...	May 15	M	15	37	12.38	...	92	34	34.9	7.0
	... ..	" 16	R		37	12.47	...		34	37.8	8.5
	... ..	" 20	R		37	12.44	5		34	38.7	9.7
582	24 Serpentis α ...	May 23	R	15	37	31.29	...	83	8	27.6	...
	... ..	June 20	R		37	31.28	...		8	27.9	...
	... ..	" 26	R		37	31.26	...		8	27.3	...
	... ..	" 27	R		37	31.27	...		8	26.9	...
	... ..	July 10	M		37	31.23	...		8	26.3	...
	... ..	" 13	M		37	31.19	...		8	26.7	...
583	28757 Lalande ...	May 27	R	15	42	3.02	...	92	48	42.3	8.7
	... ..	" 29	R		42	2.82	...		48	42.7	...
	... ..	June 9	M		42	2.84	...		48	41.4	8.0
584	R Coronæ Bor. Var. 1.	May 20	R	15	42	55.73	4	61	25	16.8	7.8
	... ..	June 10	M		42	55.89	...		25	17.0	7.0
585	R Serpentis Var. 2 ...	May 16	R	15	44	22.70	...	74	26	27.0	9.4
586	43 Libræ θ ...	June 27	R	15	46	1.06	4	106	19	27.3	...
587	... ..	June 1	M	15	50	59.46	...	143	45	34	7.0

Separate Results of Meridian Circle Observations in 1863.

No.	Star	Date of Observation	Observer	Mean Right Ascension, 1863.			No. of Wires	Mean Polar Distance, 1863			Magnitude
				h	m	s		"	"	"	
588	7 Scorpii 3 ...	June 27	R	15	52	14.19	4	112	13	43.4	...
589	7439 Taylor ...	May 20	R	15	54	22.91	5	126	44	53.9	8.5
590	5 Scorpii A ¹ ...	Apl. 28	P	15	57	23.02	...	109	25	35.6	...
	... ..	May 21	R		57	25.50	...		25	39.0	...
	... ..	" 30	R		57	25.52	...		25	38.2	...
	... ..	June 26	R		57	25.45	5		25	39.3	...
	... ..	July 13	M		57	25.44	...		25	38.4	...
	... ..	" 14	M		57	25.53	...		25	38.1	...
591	29891 Lalande ...	May 2	P	16	1	45.42	...	102	41	12.9	...
	... ..	" 29	R		1	45.40	...		41	13.6	...
	... ..	July 13	M		1	45.42	...		41	14.0	7.0
	... ..	" 14	M		1	45.52	...		41	13.1	7.0
592	116 R. P. L. ...	June 30	R	16	4	55.80	3	4	18	37.2	...
	 sp.	Nov. 21	R		4	55.42	3		18	33.8	...
	 sp.	" 26	R		4	55.76	3		18	36.5	...
593	XVI. 63 W. R. K. ...	May 20	R	16	5	59.73	4	102	40	55.2	...
594	1 Ophiuchi 3... ..	July 16	R	16	7	10.31	...	93	20	29.9	...
595	29810 Lalande ...	May 29	R	16	8	6.82	5	105	22	21.3	...
596	R Scorpii Var. 1. ...	Apl. 28	P	16	9	29.13	2	112	26	12.2	10.5
	... ..	May 1	P		9	29.32	...		26	11.3	10.3
	... ..	" 2	P		9	29.26	4		26	11.1	10.3
	... ..	" 16	R		9	29.55	3		26	15.4	10.7
597	... ..	July 15	R	16	9	39.76	4	113	23	22.5	10.0
598	20 Scorpii ...	June 1	M	16	12	52.00	...	115	15	37.9	...
599	11552 O A B. ...	May 30	R	16	13	10.71	4	107	21	51.8	9.0
600	... ..	June 2	M	16	14	7.95	...	146	10	55.2	7.5
601	U Scorpii Var. 4 ...	May 21	R	16	14	27.08	5	107	33	7.4	...
	... ..	" 23	R		14	27.45	1		33	5.7	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
602	... ..	May 20	R	16	15	42.36	6	128	7	31.7	9.6
603	15607 O. A. S.	June 11	M	16	16	48.38	...	107	11	21.1	9.0
	... ..	" 30	R		16	48.47	5		11	19.7	...
	... ..	July 13	M		16	48.43	...		11	20.0	9.0
604	... ..	May 28	R	16	17	55.39	5	129	30	26.5	9.2
605	21 Scorpii α ...	Apl. 28	P	16	21	0.81	...	116	7	29.2	...
	... ..	May 1	P		21	0.69	...		7	28.1	...
	... ..	" 2	P		21	0.70	...		7	27.6	...
	... ..	" 4	M		21	0.73	...		7	27.6	...
	... ..	" 5	M		21	0.68	...		7	28.0	...
	... ..	July 13	M		21	0.70	5		7	27.9	...
	... ..	" 14	M		21	0.60	...		7	28.1	...
606	23 Scorpii τ ...	May 4	M	16	27	21.69	...	117	55	42.2	...
	... ..	" 5	M		27	21.37	...		55	41.8	...
607	5784 Brisbane	July 20	R	16	30	49.55	4	150	29	19.7	9.5
608	... ..	June 2	M	16	34	32.73	...	131	6	54.5	7.8
609	40 Hercules 3	May 2	P	16	36	7.41	6	58	8	51.2	...
	... ..	July 14	M		36	7.32	...		8	47.2	...
	... ..	" 16	R		36	7.20	...		8	50.9	...
	... ..	" 19	R		36	7.25	...		8	50.6	...
	... ..	Aug. 3	M		36	7.35	...		8	52.5	...
610	15932 O. A. S.	May 20	R	16	39	18.72	6	111	55	24.7	9.2
611	8 Hercules Var. 3	May 2	P	16	45	39.77	...	74	49	32.0	8.0
	... ..	June 3	M		45	39.67	...		49	31.1	7.9
	... ..	" 9	M		45	39.60	...		49	32.6	7.8
612	... ..	May 8	M	16	48	49.65	5	125	21	11.1	8.0
613	27 Ophiuchi α	June 4	M	16	51	10.94	...	80	34	33.6	...
	... ..	" 23	R		51	11.04	...		34	33.0	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.			Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
						h.	m.	s.		°	'	"	
613	27 Ophiuchi α	...	...	June 30	R	16	51	10.91	..	80	24	33.2	...
				July 14	M		51	11.09	3		24	33.9	...
				" 16	R		51	10.97	...		24	34.1	...
				" 20	R		51	11.01	...		24	34.4	...
				" 28	R		51	11.06	...		24	33.6	...
				Aug. 12	R		51	11.00	5		24	34.4	...
614	...	...	...	June 2	M	16	52	1.15	...	122	48	45.1	8.2
615	16233 O. A. S.	...	...	July 29	R	16	53	55.13	5	110	23	27.8	8.0
616	16288 O. A. S.	...	...	June 1	M	16	56	24.05	...	119	50	1.1	7.6
617	7920 Taylor	...	...	July 11	M	16	59	41.77	..	136	50	57.9	8.0
618	64 Hercules α	...	...	May 1	P	17	8	24.17	...	75	27	4.1	..
				" 2	P		8	24.34	...		27	4.8	...
				June 29	R		8	24.01	...		27	4.7	...
				July 1	M		8	23.99	...		27	3.7	...
				" 15	R		8	24.04	...		27	3.8	...
				" 23	R		8	24.02	...		27	5.0	...
				" 25	R		8	24.07	...		27	4.2	...
				Aug. 3	M		8	23.96	...		27	3.7	...
				" 12	M		8	24.05	2		27	3.7	...
619	...	...	...	June 3	M	17	8	56.66	5	124	4	10.4	8.0
620	42 Ophiuchi θ	...	...	June 1	M	17	13	35.93	..	114	51	32.4	..
				" 2	M		13	35.91	...		51	33.2	..
				July 1	M		13	35.83	5		51	31.8	..
				" 13	M		13	35.83	...		51	31.8	..
				" 18	R		13	35.86	...		51	32.6	..
				" 20	R		13	35.92	...		51	32.0	..
				" 23	R		13	35.78	...		51	34.5	..
				Aug. 3	M		13	35.78	...		51	32.9	..
				" 7	M		13	35.84	3		51	31.9	..
621	44 Ophiuchi δ	...	...	June 1	M	17	18	0.39	...	114	2	44.2	5.0
				" 2	M		18	0.27	5		2	44.0	..

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
622	45 Ophiuchi d ...	May 5	M	17	18	36.50	...	119	41	21.7	...
623	—Arm 3 ...	July 29	R	17	18	44.27	...	150	33	53.2	...
624	... ..	July 20	R	17	29	21.26	...	125	14	36.6	8.7
	... ..	Aug. 3	M		29	21.17	...		14	34.7	8.9
625	55 Ophiuchi a ...	May 1	P	17	28	31.65	...	71	20	15.3	...
	... ..	June 29	R		28	31.43	...		20	16.9	...
	... ..	July 1	M		28	31.45	...		20	16.1	...
	... ..	" 23	R		28	31.52	...		20	16.9	...
	... ..	" 28	R		28	31.47	...		20	16.8	...
626	... ..	Aug. 24	R	17	31	30.41	3	126	15	2.1	10.2
627	58 Ophiuchi ...	June 29	R	17	35	13.26	...	111	36	46.9	...
	... ..	" 30	R		35	13.18	...		36	46.6	...
628	... ..	Aug. 12	M	17	39	29.41	6	127	21	33.1	8.5
629	... ..	June 3	M	17	39	51.70	5	126	28	18.6	8.0
630	... ..	June 29	R	17	43	16.46	...	128	36	10.7	7.7
631	... ..	July 20	R	17	44	58.68	4	128	47	40.0	9.0
632	7504 Lacaille ...	June 10	M	17	48	28.07	5	129	6	46.9	7.0
633	... ..	June 29	R	17	50	20.87	5	130	50	17.6	8.7
634	4 Sagittarii b...	May 5	M	17	51	25.71	...	113	48	0.0	5.0
	... ..	Aug. 24	R		51	25.53	...		47	59.4	...
635	—Sagittarii γ ¹ ...	June 3	M	17	56	16.20	4	119	34	26.7	...
636	... ..	Aug. 24	R	18	2	45.05	6	131	44	29.9	9.0
	... ..	" 28	M		2	45.30	4		44	28.9	9.0
637	... ..	Aug. 27	R	18	4	45.10	4	129	43	26.2	10.5

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
638	13 Sagittarii μ^1	May 5	M	18	5	34.20	...	111	5	28.4	...
	... ..	June 2	M		5	34.24	5		5	27.0	...
	... ..	" 3	M		5	34.18	..		5	27.4	...
	... ..	" 29	R		5	34.18	..		5	28.4	...
	... ..	July 29	R		5	34.17	...		5	30.7	...
	... ..	Aug. 3	M		5	34.19	..		5	27.6	...
	... ..	" 12	M		5	34.09	4		5	27.5	...
	... ..	" 15	M		5	34.13	..		5	28.3	...
	... ..	Sep. 4	M		5	34.14	5		5	28.2	...
639	... ..	June 10	M	18	6	1.14	...	122	25	10.8	8.0
640	23 Ursa Minoris δ <i>s.p.</i>	Jan. 9	M	18	16	32.55	3	3	23	46.4	...
	 <i>s.p.</i>	" 10	M		16	33.23	3		23	46.8	...
	 <i>s.p.</i>	" 19	R		16	32.51	3		23	46.5	...
	 <i>s.p.</i>	" 20	R		16	32.52	3		23	46.5	...
	 <i>s.p.</i>	Feb. 3	R		16	32.41	2		23	47.5	...
	 <i>s.p.</i>	" 9	R		16	31.80	3		23	49.1	...
	 <i>s.p.</i>	" 11	R		16	32.02	3		23	48.0	...
	 <i>s.p.</i>	" 17	R		16	32.86	3		23	47.3	...
	 <i>s.p.</i>	Mar. 2	R		16	31.99	3		23	50.0	...
641	22 Sagittarii λ	June 3	M	18	19	30.91	...	115	29	36.7	...
642	—Telescopii δ^2	Aug. 24	R	18	21	53.73	...	135	50	49.0	...
643	... ..	Aug. 24	R	18	28	12.72	5	135	34	34.5	8.0
644	3 Lyræ ϵ	July 2	M	18	32	17.92	...	51	20	30.6	...
	... ..	" 3	M		32	17.91	..		20	31.1	...
	... ..	" 20	R		32	17.92	...		20	31.0	...
	... ..	Aug. 12	M		32	18.06	...		20	31.6	...
	... ..	" 15	M		32	17.94	...		20	32.3	...
	... ..	Sep. 4	M		32	17.90	...		20	32.4	...
645	... ..	July 10	M	18	35	44.43	...	137	11	3.4	7.5
	... ..	Aug. 22	R		35	44.54	...		11	5.1	9.2
	... ..	" 24	R		35	44.28	...		11	3.3	9.2
	... ..	" 25	R		35	44.58	4		11	4.3	9.5

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
646	7872 Lacaille...	Aug. 27	R	18	42	15.77	...	136	46	7.0	6.3
647	7878 Lacaille...	Sep. 8	M	18	42	48.83	..	136	44	43.0	6.5
648	10 Lyræ β Var. 1	July 2	M	18	45	1.26	...	56	47	39.7	..
	... ..	" 3	M		45	1.26	...		47	40.2	...
	... ..	Aug. 26	R		45	1.19	...		47	41.1	..
	... ..	Sep. 12	M		45	1.30	5		47	41.2	..
649	... ..	Sep. 15	M	18	46	49.55	4	137	44	59.3	8.0
650	13 Lyræ Var. 2	July 31	R	18	51	9.74	5	46	13	59.4	..
651	.. ..	Aug. 22	R	18	51	58.59	...	149	55	55.2	9.3
652	39 Sagittarii α	June 30	R	18	56	28.18	...	111	56	19.1	..
	... ..	July 1	M		56	28.30	...		56	18.1	..
653	17 Aquilæ 3	July 2	M	18	59	6.81	...	76	20	14.6	...
	... ..	" 3	M		59	6.57	...		20	16.6	..
	... ..	Aug. 22	R		59	6.71	4		20	15.9	..
	... ..	" 26	R		59	6.69	...		20	16.8	..
	... ..	" 28	M		59	6.68	...		20	16.4	..
	... ..	Sep. 12	M		59	6.62	...		20	16.8	..
	... ..	" 15	M		59	6.75	..		20	15.2	...
654	131 R. P. L. ...	Jan. 24	R	18	59	10.74	3	3	28	5.1	..
	... ..	Mar. 12	M		59	10.15	2		28	3.7	..
655	R Aquilæ Var. 2	July 31	R	18	59	46.23	4	81	58	30.2	9.3
656	41 Sagittarii ν	June 30	R	19	1	36.73	..	111	14	16.6	..
	... ..	Aug. 24	R		1	36.80	..		14	16.6	..
657	... ..	July 13	M	19	3	1.04	...	139	22	47.1	8.0
658	T Sagittarii Var. 3	July 31	R	19	8	19.78	5	107	12	28.4	8.9
	... ..	Aug. 3	M		8	19.73	..		12	27.3	..
	... ..	" 12	M		8	19.87	4		12	28.0	8.7
	... ..	" 24	R		8	19.65	5		12	29.3	9.4

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance 1863.			Magnitude.
				h.	m.	s.		°	'	"	
659	R Sagittarii Var. 1 ...	Aug. 26	R	19	8	39.23	...	109	32	44.1	8.7
		Sep. 15	M		8	39.22	...		32	43.4	9.1
660	... ..	July 31	R	19	9	56.41	5	107	9	47.0	8.3
		Aug. 3	M		9	56.44	6		9	47.5	...
		" 24	R		9	56.43	5		9	42.7	8.5
661	... ..	July 10	M	19	9	59.69	...	146	13	2.1	8.0
662	25 Aquilæ α ...	July 3	M	19	11	23.16	...	78	38	57.7	...
		Aug. 22	R		11	23.08	...		38	57.8	...
		" 28	M		11	23.11	...		38	56.8	...
		Sep. 4	M		11	23.12	...		38	57.3	...
		" 12	M		11	23.08	...		38	57.5	...
663	44 Sagittarii ρ ¹ ...	June 4	M	19	13	43.45	4	108	6	6.5	...
		July 29	R	19	13	43.46	...		6	7.7	...
664	45 Sagittarii ρ ² ...	Aug. 24	R	19	13	51.24	5	108	33	32.8	...
665	30 Aquilæ δ ...	July 2	M	19	18	35.37	...	57	9	19.4	...
		Aug. 27	R		18	35.29	...		9	21.1	...
		Sep. 14	M		18	35.41	...		9	20.3	...
		" 15	M		18	35.23	2		9	20.0	...
666	8950 Taylor ...	July 10	M	19	22	3.94	5	143	28	11.1	6.0
667	52 Sagittarii h ¹ ...	July 31	R	19	28	21.59	...	115	10	57.8	...
		Aug. 24	R		28	21.06	...		10	57.8	...
668	... ..	July 10	M	19	31	32.04	5	143	15	37.3	...
669	R Cygni Var. 3. ...	Aug. 22	R	19	33	10.30	4	40	4	55.5	10.3
670	56 Sagittarii f ...	June 3	M	19	39	22.08	...	110	5	8.1	...
671	50 Aquilæ γ ...	Aug. 24	R	19	39	44.61	...	79	43	5.8	...
		" 27	R		39	44.65	...		43	6.4	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
672	50 Aquilæ γ ...	Aug. 28	M	19	39	41.63	...	79	43	5.7	...
	... ..	Sep. 4	M		39	41.70	..		43	3.0	..
	... ..	" 8	M		39	41.63	..		43	5.6	...
672	53 Aquilæ α ...	Aug. 24	R	19	44	5.86	5	81	29	28.2	..
	... ..	Sep. 14	M		44	5.86	...		29	27.9	..
673	—Cygni χ Var. 2 ..	July 31	R	19	45	17.88	5	57	25	51.3	5.7
674	55 Aquilæ η ...	Aug. 22	R	19	45	29.50	..	89	20	37.1	5.0
	... ..	" 28	M		45	29.49	..		20	36.0	5.0
675	60 Aquilæ β ...	Aug. 24	R	19	48	31.90	...	83	55	58.9	...
	... ..	Sep. 8	M		48	31.92	...		55	58.5	...
	... ..	" 12	M		48	31.58	..		55	0.1	...
	... ..	" 14	M		48	34.85	...		55	59.7	..
	... ..	" 15	M		48	31.87	...		55	58.8	..
676	... ..	July 13	M	19	49	28.86	5	145	56	59.3	8.5
677	... ..	Aug. 22	R	19	52	55.25	5	147	11	2.4	9.2
678	—Uran Minoris λ <i>s.p.</i>	Feb. 4	R	20	1	4.48	3	1	6	4.3	...
	 <i>s.p.</i>	Mar. 3	M		1	3.85	3		6	4.9	...
	 <i>s.p.</i>	" 5	M		1	3.38	3		6	3.7	...
679	R Capricorni Var. 1.	Aug. 27	R	20	3	37.20	5	104	40	14.7	10.0
	... ..	Oct. 6	M		3	37.07	...		40	12.4	9.8
680	... ..	July 13	M	20	4	6.47	...	117	14	43.1	8.2
681	... ..	Sep. 15	M	20	7	38.36	5	81	22	38.0	9.2
682	R Sagittæ Var. 1	July 31	R	20	7	49.63	5	73	41	11.0	9.7
	... ..	Oct. 5	M		7	49.47	..		41	10.6	9.7
683	5 Capricorni α' ...	July 1	M	20	10	3.01	..	102	55	43.7	...
164	6 Capricorni α' ...	June 4	M	20	10	27.12	..	102	58	0.2	...
		July 29	R		10	26.97	...		58	3.2	...

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Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
684	6 Capricorni α ¹	Aug. 28	M	20	10	26.93	...	102	58	0.6	...
	...	Sep. 8	M		10	27.02	...		58	0.9	...
	...	" 14	M		10	26.97	...		58	1.2	...
	...	" 18	R		10	26.94	...		58	0.8	...
	...	" 23	R		10	26.90	...		58	0.8	...
685	34 Cygni	Aug. 22	R	20	12	44.12	3	52	23	30.7	6.0
	...	Oct. 2	M		12	44.52	...		23	31.4	5.9
	...	" 6	M		12	44.41	...		23	28.9	5.9
686	— Pavonis α...	July 29	R	20	14	47.13	4	147	10	14.4	...
687	8441 Lacaille	Oct. 7	M	20	18	9.46	...	121	7	9.6	8.6
688	11 Capricorni ρ	June 4	M	20	21	2.53	...	108	15	49.6	...
	...	July 1	M		21	2.45	...		15	49.8	...
	...	" 31	R		21	2.49	5		15	50.8	...
	...	Aug. 18	R		21	2.51	...		15	51.4	...
	...	" 27	R		21	2.53	...		15	50.0	...
	...	Sep. 15	M		21	2.46	5		15	50.0	...
	...	" 18	R		21	2.50	6		15	49.5	...
	...	" 23	R		21	2.48	...		15	51.2	...
	...	Oct. 1	M		21	2.37	...		15	50.3	...
	...	" 8	M		21	2.56	...		15	50.8	...
	...	" 9	M		21	2.47	...		15	49.5	...
	...	" 10	M		21	2.50	...		15	49.9	...
689	...	Oct. 7	M	20	27	46.43	...	143	16	35.9	8.8
690	24 Cephei (Her.)	Oct. 8	M	20	28	56.11	2	1	17	20.4	7.0
691	...	Oct. 2	M	20	29	40.82	5	143	52	14.6	9.0
692	143 R. P. I. ...	Oct. 6	M	20	29	50.61	5	5	18	42.2	...
693	...	Oct. 10	M	20	30	47.79	...	140	35	34.7	8.1
694	8 Capricorni Var. 2	Aug. 22	R	20	33	53.78	...	109	32	34.9	9.0
	...	Sep. 14	M		33	53.92	...		32	33.6	9.3

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
695	... ..	July 31	R	20	36	44.82	...	73	23	17.5	9.2
		Sep. 18	R		36	44.84	...		23	16.9	8.8
696	50 Cygni α ...	July 29	R	20	36	45.64	...	45	12	29.3	...
697	S Delphini Var. 2 ...	Oct. 9	M	20	36	46.06	...	73	24	9.9	8.9
698	... ..	Oct. 7	M	20	38	4.22	...	143	3	29.6	9.3
699	2 Aquarii ε ...	Aug. 27	R	20	40	15.30	...	100	59	42.4	...
700	8571 Lacaille ..	Oct. 10	M	20	42	48.35	...	150	13	10.8	7.7
701	9033 Taylor ...	July 2	M	20	44	30.80	3	101	56	0.6	7.0
702	6 Aquarii μ ...	Aug. 27	R	20	45	15.65	...	99	29	42.9	...
703	... ..	Oct. 8	M	20	47	36.56	...	149	2	5.8	8.9
704	32 Vulpeculæ ...	Aug. 22	R	20	48	43.20	5	62	27	30.6	...
		Sep. 18	R		48	43.21	...		27	44.2	..
705	... ..	Oct. 7	M	20	53	53.28	4	142	59	27.0	9.4
706	R Vulpeculæ Var 2 ..	Aug. 27	R	20	58	23.38	3	65	42	55.8	10.5
		Sep. 26	R		58	23.28	5		42	54.0	9.5
707	... ..	Oct. 10	M	20	58	30.79	...	148	52	55.0	9.8
708	9772 Taylor ...	Sep. 14	M	21	0	23.07	..	145	7	32.1	7.5
709	61 Cygni (1st) ...	Aug. 18	R	21	0	48.44	..	51	55	22.8	..
710	13 Aquarii ε ..	July 2	M	21	2	7.64	...	101	55	20.6	..
		" 3	M		2	7.58	4		55	28.1	..
711	64 Cygni 3 ...	Aug. 18	R	21	7	6.28	...	60	20	17	...
		Sep. 30	R		7	6.25	...		20	19	...
		Oct. 1	M		7	6.32	...		20	15	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
711	61 Cygni 3	Oct. 3	M	21	7	6.36	...	60	20	1.5	...
	... ..	" 5	M		7	6.30	...		20	0.8	...
	... ..	" 23	R		7	6.35	...		20	2.0	...
712	8748 Lacaille	Sep. 14	M	21	9	43.32	4	145	7	50.0	8.9
713	22 Aquarii β	July 31	R	21	24	20.59	...	96	10	19.9	...
	... ..	Sep. 23	R		24	20.58	...		10	20.3	...
	... ..	" 28	R		24	20.71	...		10	20.9	...
	... ..	" 30	R		24	20.68	5		10	20.0	...
	... ..	Oct. 1	M		24	20.73	...		10	20.0	...
	... ..	" 5	M		24	20.55	...		10	19.8	...
	... ..	" 7	M		24	20.68	...		10	19.6	...
	... ..	" 8	M		24	20.64	...		10	19.9	...
	... ..	" 9	M		24	20.62	...		10	19.8	...
	... ..	" 10	M		24	20.65	...		10	20.5	...
	... ..	" 23	R		24	20.70	...		10	20.7	...
714	... ..	Sep. 14	M	21	25	45.04	5	140	23	42.6	9.0
715	23 Aquarii 1	July 31	R	21	30	27.30	...	98	28	1.7	...
	... ..	Sep. 23	R		30	27.29	...		28	1.2	...
716	10032 Taylor... ..	Oct. 6	M	21	30	37.36	5	142	58	30.5	6.3
717	10065 Taylor	Oct. 8	M	21	34	23.88	4	145	7	22.2	6.2
718	8 Pegasi ϵ	Sep. 26	R	21	37	27.42	...	80	45	7.1	...
	... ..	" 28	R		37	27.37	3		45	6.6	...
	... ..	Oct. 3	M		37	27.40	...		45	6.1	...
	... ..	" 6	M		37	27.38	...		45	5.8	...
	... ..	" 7	M		37	27.36	...		45	6.2	...
	... ..	" 10	M		37	27.36	...		45	5.6	...
719	— Cephei μ Var. 1 ..	Aug. 24	R	21	39	18.68	...	31	50	51.1	5.5
		Oct. 5	M		39	18.97	...		50	52.5	5.2
		" 9	M		39	18.94	...		50	51.0	5.5
720	16 Pegasi	Sep. 26	R	21	46	49.75	...	64	43	7.0	...
		" 28	R		46	49.70	...		43	6.9	...

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				h.	m.	s.		°	'	"	
720	16 Pegasi	Sep. 30	R	21	46	49.73	...	64	43	7.5	...
		Oct. 3	M		46	49.76	...		43	8.4	...
		" 6	M		46	49.80	...		43	6.1	...
		" 7	M		46	49.73	...		43	8.2	...
		" 8	M		46	49.67	...		43	7.0	...
		" 23	R		46	49.67	...		43	7.9	...
721	10190 Taylor... ..	Oct. 14	M	21	51	1.58	...	146	32	12.3	6.0
722	... ..	Aug. 24	R	21	53	45.64	5	150	49	33.5	9.7
		Nov. 2	M		53	45.94	3		49	34.0	9.6
723	... ..	Sep. 14	M	21	58	8.61	1	136	2	51.4	9.3
724	34 Aquarii α	Sep. 30	R	21	58	41.73	...	90	59	3.9	...
		Oct. 1	M		58	41.58	...		59	3.1	...
		" 3	M		58	41.71	...		59	4.3	...
		" 5	M		58	41.71	...		59	4.0	...
		" 14	M		58	41.78	...		59	3.7	...
725	... ..	Oct. 5	M	22	5	21.38	...	101	6	5.1	9.6
		" 6	M		5	21.04	3		6	5.7	9.4
726	... ..	Oct. 14	M	22	9	2.20	...	98	23	21.4	7.0
727	... ..	Oct. 7	M	22	9	3.86	5	146	27	35.2	9.0
728	43 Aquarii θ	Aug. 27	R	22	9	36.11	...	98	27	51.3	...
729	48 Aquarii γ	July 31	R	22	14	34.62	...	92	4	36.0	...
		Aug. 27	R		14	34.72	6		4	36.0	...
730	... ..	Oct. 17	R	22	15	17.57	5	82	47	40.5	...
731	... ..	Oct. 6	M	22	18	46.90	5	140	46	3.5	9.6
732	150 R. P. L. .. s.p.	Feb. 2	S	22	23	41.72	3	4	34	56.7	...
	 s.p.	Mar. 9	M		23	42.63	3		35	0.1	...
	 s.p.	" 18	M		23	42.84	3		35	0.3	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
732	150 R. P. L. ... s.p.	Apl. 30	M	22	23	42.30	3	4	34	59.6	...
		Nov. 2	M		23	42.04	3		35	2.3	...
		" 4	M		23	41.06	3		35	2.4	...
733	21 Cephei δ ...	July 31	R	22	24	5.40	5	32	17	8.7	5.7
		Sep. 8	M		24	5.23	3		17	10.0	5.5
		Oct. 5	M		24	5.34	...		17	9.3	5.5
		" 14	M		24	5.54	...		17	10.3	5.6
734		Oct. 7	M	22	24	36.10	5	146	50	51.5	9.8
735		Oct. 6	M	22	25	48.37	...	141	30	31.5	8.0
736	62 Aquarii η ...	July 31	R	22	28	18.50	...	90	40	23.4	...
		Sep. 25	R		28	18.97	5		40	23.0	...
		Oct. 2	M		28	18.81	...		40	22.4	...
		" 9	M		28	18.82	...		40	21.7	...
		" 13	M		28	19.05	...		40	21.0	...
		" 14	M		28	18.96	...		40	23.4	...
		" 16	R		28	18.90	...		40	22.5	...
		" 17	R		28	18.91	...		40	21.4	...
		Nov. 3	M		28	18.83	...		40	23.5	...
737		Oct. 8	M	22	32	3.46	...	148	8	5.0	6.0
738	42 Pegasi δ ...	Oct. 5	M	22	34	37.76	...	79	52	59.3	...
		" 10	M		34	37.60	...		52	59.3	...
		" 17	R		34	37.74	...		52	59.1	...
		Nov. 4	M		34	37.59	...		53	0.4	...
739		Oct. 6	M	22	37	35.40	5	145	46	57.5	6.6
740	XXII. 844 W. B. E. ...	Sep. 26	R	23	40	31.06	...	87	48	59.4	8.9
741		Oct. 16	R	22	40	48.26	...	142	38	21.7	9.1
		Nov. 4	M		40	48.65	3		38	19.5	9.1
742		Oct. 7	M	22	44	39.06	...	145	33	18.7	10.0
		" 27	R		44	40.19	5		33	20.5	9.3

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				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
743	...	Oct. 8	M	22	44	46.67	...	148	34	50.3	7.9
	...	Nov. 11	M		44	46.63	...		34	51.6	8.0
744	S Aquarii Var. 2	Oct. 17	R	22	49	45.50	...	111	4	27.6	8.9
	...	" 27	R		49	45.65	...		4	25.7	8.7
745	24 Piscis Australis a.	Oct. 6	M	22	50	4.32	...	120	20	50.7	...
	...	" 7	M		50	4.38	...		20	51.0	...
	...	" 9	M		50	4.33	...		20	51.7	...
	...	" 14	M		50	4.38	...		20	52.6	...
	...	" 16	R		50	4.38	...		20	51.5	...
	...	Nov. 6	M		50	4.42	...		20	52.8	...
	...	" 13	M		50	4.44	...		20	51.6	...
	...	" 14	M		50	4.46	...		20	51.9	...
746	...	Oct. 10	M	22	51	22.53	...	151	33	39.0	9.2
747	...	Oct. 13	M	22	51	47.53	...	85	26	50.2	9.3
748	9353 Lacaille	Sep. 8	M	22	56	32.24	...	144	41	54.1	6.0
749	...	Nov. 7	M	22	57	7.80	...	149	38	17.9	9.0
750	53 Pegasi β Var. 1	Oct. 5	M	22	57	8.24	5	62	39	36.2	...
751	54 Pegasi α	Oct. 8	M	22	57	56.18	...	75	31	54.3	...
	...	" 16	R		57	56.23	...		31	53.7	...
	...	" 24	R		57	56.31	...		31	54.3	...
	...	Nov. 11	M		57	56.24	5		31	54.4	...
752	...	Oct. 9	M	22	59	16.44	...	150	22	26.9	9.8
753	9377 Lacaille	Oct. 10	M	23	2	8.81	...	151	18	22.3	6.8
	...	Nov. 13	M		2	8.60	...		18	22.3	6.2
754	90 Aquarii ϕ	Aug. 29	R	23	7	13.63	5	96	47	14.0	...
755	9405 Lacaille	Oct. 9	M	23	7	22.68	...	150	26	28.5	8.3
	...	" 20	R		7	22.76	...		26	28.4	8.0

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				A.	m.	s.		°	'	"	
755	9403 Lacaille ...	Oct. 27	R	23	7	22.78	5	150	26	24.6	7.5
		" 30	R		7	22.85	5		26	23.4	8.8
756	6 Piscium γ ...	Oct. 13	M	23	10	3.69	...	87	27	57.4	...
		" 14	M		10	3.69	...		27	59.2	...
		" 16	R		10	3.77	...		27	57.6	...
		" 17	R		10	3.70	...		27	57.1	...
		Nov. 3	M		10	3.84	...		27	56.6	...
		" 6	M		10	3.76	...		27	58.3	...
		" 11	M		10	3.82	...		27	57.4	...
		" 13	M		10	3.75	...		27	57.7	...
757		Oct. 10	M		11	2.03	...	151	16	3.7	9.8
758		Nov. 14	M	23	11	15.10	5	136	54	41.3	8.6
759		Sep. 8	M	23	12	4.13	...	137	4	14.6	5.5
760	96 Aquarii ...	Aug. 28	M	23	12	17.65	...	95	52	21.0	5.5
761	4040 Groombridge ...	Oct. 27	R	23	12	55.84	2	17	3	35.0	7.0
762	10748 Taylor ...	Oct. 7	M	23	17	29.48	5	147	36	2.7	5.0
		Nov. 6	M		17	29.44	...		36	3.3	6.0
		" 13	M		17	29.36	...		36	3.3	5.9
763		Oct. 8	M	23	19	38.74	...	151	38	24.2	9.9
764	8 Piscium α ...	Sep. 25	R	23	19	54.50	...	89	29	39.6	...
		" 26	R		19	54.55	...		29	39.0	...
		Oct. 2	M		19	54.68	...		29	40.0	...
		" 13	M		19	54.48	...		29	39.9	...
		" 17	R		19	54.50	...		29	38.3	...
		" 24	R		19	54.50	...		29	40.4	...
		" 26	R		19	54.50	...		29	39.3	...
		" 31	R		19	54.52	...		29	38.8	...
		Nov. 3	M		19	54.52	...		29	39.4	...
		" 4	M		19	54.64	...		29	39.8	...
		" 6	M		19	54.59	...		29	38.9	...
		" 20	R		19	54.53	...		29	39.6	...

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Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
765		Sep. 8	M	23	20	59.71	...	137	29	3.9	9.6
		Oct. 30	R		20	59.97	...		29	5.0	9.0
766		Nov. 7	M	23	23	33.84	...	148	57	55.0	8.8
767	10804 Taylor	Oct. 7	M	23	27	26.26	3	147	34	54.1	6.4
		" 27	R		27	26.36	...		34	54.7	6.7
		Nov. 4	M		27	26.66	...		34	52.4	6.0
768		Oct. 6	M	23	27	42.50	5	148	15	5.2	5.8
769	158 R. P. 1.	Mar. 20	R	23	27	49.96	4	3	26	54.7	...
		" 24	R		27	49.83	3		26	52.1	...
		" 26	R		27	49.78	3		26	55.9	...
		" 28	R		27	49.72	3		26	53.3	...
		" 31	R		27	49.62	3		26	55.6	...
		Apl. 23	R		27	49.91	3		26	53.3	...
		May 2	M		27	49.68	3		26	56.8	...
		Sep. 28	R		27	49.82	3		26	53.7	...
		Oct. 17	R		27	50.29	3		26	55.1	...
		" 31	R		27	49.79	3		26	54.8	...
		Nov. 9	M		27	50.01	3		26	54.4	...
											...
770		Sep. 8	M	23	29	51.04	6	137	20	27.5	10.0
		Oct. 30	R		29	51.35	...		20	28.7	9.0
771		Nov. 7	M	23	30	21.40	5	148	57	0.4	8.4
772	17 Piscium	Aug. 29	R	23	32	54.22	...	85	6	57.6	...
		Sep. 25	R		32	54.26	...		6	58.1	...
		" 26	R		32	54.28	...		6	57.4	...
		Oct. 2	M		32	54.32	...		6	57.2	...
		" 26	R		32	54.25	...		6	59.4	...
		" 27	R		32	54.26	3		6	58.7	...
		Nov. 2	M		32	54.22	...		6	59.2	...
		" 3	M		32	54.30	...		6	58.7	...
		" 5	M		32	54.25	...		6	57.8	...
		" 11	M		32	54.31	...		6	57.9	...
		" 20	R		32	54.27	...		6	58.2	...

Separate Results of Madras Meridian Circle Observations in 1863.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1863.			No. of Wires.	Mean Polar Distance. 1863.			Magnitude.
				h.	m.	s.		°	'	"	
773	... ..	Nov. 4	M	23	34	17.16	5	147	27	44.8	9.2
774	... ..	Sep. 28	R	23	36	43.67	5	106	2	41.7	9.2
775	— Sculptoris δ	Aug. 29	R	23	41	47.10	...	118	53	15.5	...
	... ..	Oct. 2	M		41	47.00	...		53	16.7	...
	... ..	" 13	M		41	47.09	...		53	17.2	...
	... ..	" 26	R		41	47.17	...		53	16.7	...
	... ..	" 27	R		41	47.23	...		53	16.4	...
	... ..	" 30	R		41	46.97	...		53	15.6	...
	... ..	" 31	R		41	47.08	...		53	16.3	...
	... ..	Nov. 2	M		41	47.19	...		53	17.5	...
	... ..	" 4	M		41	47.04	...		53	16.7	...
	... ..	" 5	M		41	47.07	...		53	16.2	...
	... ..	" 6	M		41	47.09	...		53	17.8	...
	... ..	" 7	M		41	47.04	...		55	16.1	...
	... ..	" 9	M		41	47.14	...		53	16.0	...
	... ..	Oct. 10	M	23	42	0.32	...	150	50	19.7	9.2
	... ..	Nov. 20	R		42	0.21	5		50	17.9	8.0
777	9038 Lacaille	Oct. 8	M	23	46	58.39	...	150	18	19.0	7.7
	... ..	Nov. 11	M		46	58.35	...		18	20.0	7.8
778	R Cassiopeæ Var. 3...	Sep. 28	R	23	51	27.44	5	39	22	30.2	9.5
779	... ..	Nov. 13	M	23	51	55.83	5	143	16	18.8	9.4
780	28 Piscium α	Aug. 29	R	23	52	16.09	...	83	53	42.3	...
	... ..	Oct. 27	R		52	16.61	...		53	40.3	...
	... ..	" 30	R		52	16.60	...		53	42.2	...
	... ..	Nov. 2	M		52	16.56	...		53	43.7	...
	... ..	" 6	M		52	16.56	...		53	43.9	...
781	10290 Taylor	Oct. 10	M	23	56	50.46	...	148	35	29.9	9.3
	... ..	Nov. 11	M		56	50.80	5		35	30.1	9.1
782	10294 Taylor	Oct. 9	M	23	57	44.29	...	117	36	20.6	8.0

MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1863

REDUCED TO JANUARY 1. OF THAT YEAR.

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
1	21 Androm. α (Alpherat)...	2.0	...	0	1	18.65	61	39	59.5	4	0.84
2	" " " " " " " " " " " "	6.3	2	0	6	3.64	148	40	36.5	2	0.82
3	88 Pegasi γ (Algenib) ...	2.7	...	0	6	10.97	75	34	43.5	6	0.81
4	" " " " " " " " " " " "	8.9	2	0	9	19.89	149	32	11.4	2	0.82
5	" " " " " " " " " " " "	9.4	1	0	12	44.45	150	26	58.0	1	0.84
6	41 Piscium d " " " " " "	6.0	...	0	13	32.06	82	34	16.0	1	0.73
7	R Andromedæ Var. 1 " " " "	8.4	5	0	16	48.16	52	10	55.1	5	0.76
8	" " " " " " " " " " " "	9.7	4	0	17	34.73	149	35	29.5	4	0.83
9	45 Piscium " " " " " "	6.8	...	0	18	33.19	83	3	59.8	3	0.84
10	12 Ceti " " " " " "	6.5	...	0	23	2.81	94	42	54.2	6	0.86
11	" " " " " " " " " " " "	10.5	1	0	25	19.92	76	9	33.2	1	0.89
12	" " " " " " " " " " " "	9.6	6	0	28	50.66	89	7	55.6	7	0.83
13	" " " " " " " " " " " "	9.6	9	0	30	44.81	89	7	54.3	10	0.80
14	18 Cassiopeiæ α Var. 1 " " " "	3.0	...	0	32	45.04	34	12	54.1	2	0.93
15	1097 Lalande " " " " " "	8.1	6	0	34	32.75	89	0	17.3	6	0.86
16	1123 Lalande " " " " " "	9.0	8	0	35	38.90	89	3	31.7	8	0.87
17	16 Ceti β " " " " " "	2.0	...	0	36	42.69	108	44	20.9	2	0.94
18	1198 Lalande " " " " " "	8.8	8	0	38	3.50	88	56	37.0	9	0.90
19	0.658 W. B. E. " " " " " "	9.5	8	0	38	34.94	89	2	32.4	9	0.89
20	63 Piscium δ " " " " " "	4.9	...	0	41	34.55	83	9	41.0	2	0.77
21	" " " " " " " " " " " "	9.3	5	0	41	37.08	89	6	56.0	6	0.91
22	" " " " " " " " " " " "	9.9	9	0	42	5.98	88	49	48.6	10	0.86
23	0.806 W. B. E. " " " " " "	9.7	7	0	46	30.94	88	50	6.3	7	0.85
24	" " " " " " " " " " " "	9.1	...	0	47	52.11	133	47	34.4	1	0.73
25	1638 Lalande " " " " " "	7.8	6	0	50	37.46	88	57	25.0	7	0.87
26	1639 Lalande " " " " " "	8.9	5	0	50	39.34	88	38	54.9	7	0.89
27	271 Lacaille " " " " " "	7.8	1	0	52	39.79	151	26	17.1	1	0.77
28	1784 Lalande " " " " " "	8.1	7	0	54	55.91	88	12	48.3	7	0.86
29	71 Piscium ϵ " " " " " "	4.6	...	0	55	50.07	82	50	54.5	11	0.97
30	1879 Lalande " " " " " "	7.9	6	0	57	40.82	88	25	15.6	7	0.86
31	0.1031 W. B. E. " " " " " "	9.0	7	0	59	4.86	88	6	8.9	7	0.89
32	" " " " " " " " " " " "	9.8	10	1	2	8.88	87	57	27.7	10	0.83
33	1.15 W. B. E. " " " " " "	9.4	9	1	2	57.08	87	39	1.8	9	0.83
34	2089 Lalande " " " " " "	8.7	5	1	3	24.39	88	10	34.9	7	0.93
35	33 Ceti " " " " " "	6.3	...	1	3	20.63	88	17	5.7	4	0.90

7. — R Andromedæ Var. 1. — Period, 405 days. — Range, 6th. to 13th. magnitude.
 12, 13, 15, 16, 18, 19, 21, 22, 23, 25, 26, 28, 30, 31, 32, 33, 34, 35. Comparison stars used with Mars in opposition in 1862, for investigation of the constant of Solar Parallax.
 14 — α Cassiopeiæ Var. 1. — Irregular. Range, 2.2 to 2.8 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
1	21 Andromedæ a ...	+ 3.0701	+ 0.0182	+ 0.009	- 20.050	+ 0.013	+ 0.15	4
2	... ..	+ 3.0140	- 0.0440	...	- 20.048	+ 0.021	...	...
3	88 Pegasi γ ..	+ 3.0812	+ 0.0100	0.000	- 20.040	+ 0.022	+ 0.02	26
4	...	+ 2.9795	- 0.0452	...	- 20.039	+ 0.027	...	...
5	...	+ 2.9411	- 0.0453	...	- 20.024	+ 0.033	...	...
6	41 Piscium d	+ 3.0824	+ 0.0060	- 0.002	- 20.020	+ 0.036	- 0.01	66
7	R Andromedæ V. 1	+ 3.1481	+ 0.0271	...	- 20.001	+ 0.043	...	...
8	...	+ 2.8975	- 0.0419	...	- 19.996	+ 0.034	...	...
9	45 Piscium	+ 3.0853	+ 0.0066	...	- 19.989	+ 0.046	...	89
10	12 Ceti	+ 3.0609	+ 0.0008	- 0.002	- 19.955	+ 0.055	+ 0.01	112
11	...	+ 3.1084	+ 0.0108	...	- 19.933	+ 0.059	...	...
12	...	+ 3.0746	+ 0.0039	...	- 19.896	+ 0.065	...	...
13	...	+ 3.0748	+ 0.0040	...	- 19.875	+ 0.069	...	...
14	18 Cassiopæ Var. 1	+ 3.3519	+ 0.0553	+ 0.006	- 19.851	+ 0.080	+ 0.04	169
15	1097 Lalande	+ 3.0755	+ 0.0043	...	- 19.828	+ 0.076	...	...
16	1123 Lalande	+ 3.0755	+ 0.0044	...	- 19.814	+ 0.079	...	...
17	16 Ceti β	+ 2.9997	- 0.0055	+ 0.013	- 19.799	+ 0.080	- 0.02	196
18	1198 Lalande	+ 3.0761	+ 0.0045	...	- 19.779	+ 0.083	...	...
19	0.658 W. H. E.	+ 3.0758	+ 0.0046	...	- 19.772	+ 0.084	...	...
20	63 Piscium δ	+ 3.1009	+ 0.0079	+ 0.003	- 19.727	+ 0.090	+ 0.05	222
21	...	+ 3.0758	+ 0.0047	...	- 19.726	+ 0.089	...	...
22	...	+ 3.0770	+ 0.0048	...	- 19.718	+ 0.090	...	...
23	0.806 W. H. E.	+ 3.0776	+ 0.0051	...	- 19.642	+ 0.099	...	...
24	...	+ 2.8063	- 0.0185	...	- 19.619	+ 0.093	...	...
25	1038 Lalande	+ 3.0774	+ 0.0052	...	- 19.567	+ 0.107	...	...
26	1039 Lalande	+ 3.0790	+ 0.0054	...	- 19.567	+ 0.107	...	...
27	271 Lacaille	+ 2.5126	- 0.0280	...	- 19.529	+ 0.092	...	276
28	1784 Lalande	+ 3.0820	+ 0.0058	...	- 19.481	+ 0.115	...	...
29	71 Piscium ε	+ 3.1125	+ 0.0087	- 0.002	- 19.463	+ 0.119	0.00	288
30	1879 Lalande	+ 3.0813	+ 0.0058	...	- 19.423	+ 0.120	...	...
31	0.1031 W. H. E.	+ 3.0834	+ 0.0061	...	- 19.392	+ 0.123	...	...
32	...	+ 3.0849	+ 0.0063	...	- 19.323	+ 0.129	...	...
33	1.15 W. H. E.	+ 3.0870	+ 0.0065	...	- 19.304	+ 0.130	...	...
34	2089 Lalande	+ 3.0837	+ 0.0062	...	- 19.293	+ 0.131	...	...
35	33 Ceti	+ 3.0930	+ 0.0062	- 0.003	- 19.290	+ 0.131	+ 0.02	344

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
36	86 Piscium 3	6.0	..	1	6	34.48	83	9	0.7	3	0.79
37	1.101 W. B. E.	8.9	6	1	7	42.74	87	54	19.0	7	0.90
38	1 Urs. Min. α (<i>Polaris</i>) ...	2.0	.	1	8	59.64	1	25	15.5	9	0.46
39	... ..	9.8	8	1	9	13.01	87	42	24.6	8	0.55
40	45 Ceti θ	3.0	...	1	17	10.52	98	53	29.5	12	0.93
41	... ..	8.1	2	1	23	24.95	87	44	17.2	2	0.92
42	R Piscium Var. 1	10.2	1	1	23	34.40	87	49	43.4	1	0.98
43	99 Piscium η	4.0	...	1	24	0.33	75	21	43.4	10	0.90
44	102 Piscium π	6.0	...	1	29	50.24	78	33	39.1	1	0.82
45	525 Taylor	5.9	2	1	30	0.98	148	50	23.7	2	0.84
46	539 Taylor	5.6	2	1	31	43.67	148	58	16.6	2	0.84
47	α Eridani (<i>Achernar</i>)	1.0	...	1	32	36.71	147	56	2.7	2	0.93
48	106 Piscium ν	4.7	...	1	34	18.23	85	12	25.4	5	0.89
49	503 Lacaille	7.9	2	1	35	40.96	151	41	30.8	2	0.88
50	507 Lacaille	6.2	2	1	37	6.50	151	28	30.3	2	0.88
51	110 Piscium σ	4.5	...	1	38	9.67	81	31	59.8	1	0.89
52	... ..	9.3	2	1	39	51.51	149	27	40.1	2	0.83
53	... ..	9.7	2	1	46	7.56	148	58	15.1	2	0.90
54	6 Arietis β	2.7	...	1	47	4.60	69	51	48.8	13	0.92
55	... ..	9.4	2	1	48	31.09	150	5	31.0	2	0.87
56	582 Lacaille	8.6	2	1	50	52.76	145	44	39.6	2	0.84
57	... ..	9.6	2	1	50	21.58	150	2	49.9	2	0.87
58	13 Arietis α	2.0	..	1	50	27.31	67	11	15.3	10	0.94
59	630 Lacaille	6.0	2	1	50	46.48	145	32	17.0	2	0.86
60	... ..	9.6	2	2	1	1.59	149	49	21.0	2	0.83
61	697 Taylor	7.4	2	2	1	43.93	145	44	15.9	2	0.90
62	17 Arietis η	6.0	...	2	5	8.15	69	26	5.5	1	0.96
63	677 Lacaille	8.0	1	2	6	54.10	149	47	52.8	1	0.65
64	... ..	9.8	1	2	6	50.71	148	39	46.7	1	0.86
65	67 Ceti	6.0	...	2	10	9.05	97	3	20.0	6	0.96
66	68 Ceti ϵ Var. 1	7.8	1	2	12	25.04	98	36	8.6	1	0.96
67	... ..	9.7	2	2	13	50.34	148	27	12.9	2	0.93
68	... ..	8.1	2	2	15	37.88	152	34	27.9	2	0.91
69	819 Taylor	8.3	2	2	19	6.29	147	26	14.9	2	0.82
70	73 Ceti 1 st	4.5	...	2	20	52.64	82	9	21.2	8	0.92

37.—39.—Comparison stars used with Mars in opposition in 1862, for investigation of the constant of Solar Parallax.

43.—R Piscium Var. 1.—Period, 345 days. Range, 7.6 to 12th. magnitude.

66.—Mira Ceti Var. 1.—Period, 331 days. Range, 2nd. to 10th. magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
36	86 Piscium 3...	+ 3.1180	+ 0.0090	...	- 19.215	+ 0.139	...	369
37	1.101 W. B. E.	+ 3.0863	+ 0.0066	...	- 19.186	+ 0.139	...	...
38	1 Urs. Min. a	+ 19.0547	+ 13.1149	+ 0.065	- 19.153	+ 0.832	0.00	360
39	...	+ 3.0880	+ 0.0069	...	- 19.148	+ 0.142	...	...
40	45 Ceti 6	+ 3.0029	+ 0.0018	- 0.007	- 18.929	+ 0.164	+ 0.22	420
41	...	+ 3.0909	+ 0.0073	...	- 18.741	+ 0.169	...	...
42	R Piscium Var. 1	+ 3.0902	+ 0.0073	...	- 18.736	+ 0.169	...	...
43	99 Piscium w...	+ 3.1974	+ 0.0142	0.000	- 18.719	+ 0.176	0.00	453
44	102 Piscium w	+ 3.1754	+ 0.0125	- 0.007	- 18.634	+ 0.185	- 0.03	488
45	525 Taylor	+ 2.2248	- 0.0135	...	- 18.625	+ 0.133	...	...
46	530 Taylor	+ 2.2061	- 0.0129	...	- 18.471	+ 0.133	...	497
47	a Eridani	+ 2.2329	- 0.0128	+ 0.008	- 18.440	+ 0.137	+ 0.07	507
48	106 Piscium v	+ 3.1168	+ 0.0091	- 0.004	- 18.382	+ 0.191	+ 0.04	518
49	503 Lacaille	+ 2.0655	- 0.0104	...	- 18.333	+ 0.130	...	...
50	507 Lacaille...	+ 2.0604	- 0.0099	...	- 18.252	+ 0.132	...	531
51	110 Piscium o	+ 3.1547	+ 0.0111	+ 0.006	- 18.244	+ 0.200	- 0.01	537
52	...	+ 2.1155	- 0.0108	...	- 18.182	+ 0.138	...	...
53	...	+ 2.0793	- 0.0082	...	- 17.943	+ 0.144	...	...
54	6 Arietis 6	+ 3.2928	+ 0.0183	+ 0.002	- 17.906	+ 0.230	+ 0.11	577
55	...	+ 2.0121	- 0.0067	...	- 17.849	+ 0.142	...	...
56	582 Lacaille	+ 2.1588	- 0.0081	...	- 17.754	+ 0.165	...	...
57	...	+ 1.9176	- 0.0081	...	- 17.396	+ 0.146	...	...
58	13 Arietis a	+ 3.3521	+ 0.0203	+ 0.012	- 17.392	+ 0.282	+ 0.15	645
59	630 Lacaille	+ 2.0991	- 0.0059	...	- 17.374	+ 0.160	...	...
60	...	+ 1.9137	- 0.0028	...	- 17.323	+ 0.145	...	...
61	697 Taylor	+ 2.0778	- 0.0053	...	- 17.292	+ 0.162	...	659
62	17 Arietis w	+ 3.3325	+ 0.0188	+ 0.009	- 17.139	+ 0.280	- 0.01	682
63	677 Lacaille	+ 1.8641	- 0.0011	...	- 17.068	+ 0.160	...	...
64	...	+ 1.9170	- 0.0021	...	- 17.057	+ 0.164	...	...
65	67 Ceti	+ 2.9829	+ 0.0049	+ 0.003	- 16.907	+ 0.242	+ 0.14	704
66	a Ceti Var. 1...	+ 3.0261	+ 0.0064	- 0.001	- 16.799	+ 0.249	+ 0.23	720
67	...	+ 1.8704	- 0.0008	...	- 16.726	+ 0.163	...	...
68	...	+ 1.6347	+ 0.0055	...	- 16.644	+ 0.140	...	...
69	818 Taylor	+ 1.8778	- 0.0001	...	- 16.473	+ 0.163	...	753
70	73 Ceti 1 ^b	+ 3.1783	+ 0.0117	+ 0.001	- 16.395	+ 0.276	+ 0.02	760

67.—Proper Motions adopted from "Steno's Catalogue."

67.—70.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
71	α Horologii	6.5	2	2	21	4.15	150	55	35.8	2	0.92
72	26 R. P. L.	8.0	...	2	22	11.82	3	33	12.5	2	0.69
73	... ..	9.4	2	2	24	13.66	152	35	56.0	2	0.91
74	... ..	6.8	2	2	27	23.68	147	12	29.9	2	0.82
75	31 Arietis	6.5	...	2	29	0.86	78	8	55.0	1	0.69
76	849 Lacaille 1st ...	7.8	1	2	35	59.20	150	0	25.0	1	0.66
77	849 Lacaille 2nd ...	8.0	2	2	36	3.86	150	9	32.2	2	0.95
78	86 Ceti γ	3.3	...	2	36	12.22	87	20	39.7	6	0.91
79	38 Arietis	5.4	...	2	37	29.97	78	7	55.9	1	0.89
80	868 Lacaille	8.3	2	2	38	31.18	147	13	27.0	2	0.82
81	... ..	8.7	1	2	43	16.32	148	0	51.6	1	0.85
82	... ..	8.8	2	2	44	27.50	148	14	5.5	2	0.52
83	... ..	9.0	1	2	45	12.36	78	28	9.1	1	0.90
84	48 Arietis ϵ	4.3	...	2	51	22.99	69	12	37.9	2	0.82
85	... ..	8.5	1	2	52	20.73	150	17	22.3	1	0.88
86	92 Ceti α (Menkar) ...	2.3	...	2	55	7.17	86	27	0.4	8	0.93
87	26 Persei ρ Var. 2 ..	4.0	...	2	56	24.33	51	41	38.0	1	0.94
88	26 Persei β Var. 1 ...	2.7	...	2	59	15.82	49	34	55.4	1	0.96
89	1047 Taylor	6.0	1	2	59	50.11	151	20	4.8	1	0.86
90	33 R. P. L.	5.8	...	3	0	29.83	5	35	3.8	2	0.02
91	57 Arietis δ	4.3	...	3	3	47.97	70	47	39.7	5	0.88
92	... ..	6.7	3	3	12	35.95	130	50	31.5	3	0.66
93	61 Arietis τ^1	5.5	...	3	13	19.33	69	20	59.4	2	0.89
94	... ..	9.2	1	3	14	49.98	150	6	32.6	1	0.82
95	1 Tauri ϵ	4.7	...	3	17	26.50	81	27	20.8	1	0.95
96	... ..	9.0	1	3	20	16.88	149	19	7.8	1	0.82
97	R Persei Var. 3	10.0	2	3	21	20.23	54	48	15.4	2	0.97
98	... ..	7.5	1	3	21	56.75	88	12	37.5	1	0.88
99	... ..	9.2	2	3	25	51.95	87	53	30.3	2	0.59
100	1193 Lacaille	8.3	1	3	35	14.00	146	35	24.7	1	0.63
101	1200 Lacaille	6.7	1	3	36	23.16	146	40	44.3	1	0.87
102	... ..	9.0	1	3	38	3.95	136	13	2.8	1	0.90
103	25 Tauri η (Aloyous) ...	3.0	...	3	39	20.66	66	19	18.3	10	0.56
104	... ..	8.8	2	3	45	5.29	76	27	56.3	3	0.06
105	24 Eridani γ^1	3.0	...	3	51	28.25	103	54	2.6	8	0.69

72.—362 Carrington.

87.— ρ Persei Var. 2.—Irregular—change from 3.5 to 4.3 magnitude

88.—Algol.—Period, 2.867 days.—Range, 2.5 to 4th magnitude.

90.—205 Groombridge.

97.—R Persei Var. 3.—Period, 209 days.—Range, 8.5 to 12.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance			Number in H. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
71	α Horologii ...	+ 1'6834	+ 0'0044	...	- 16'374	+ 0'140	...	762
72	β R. P. L. ...	+ 16'6894	+ 3'5830	..	- 16'317	+ 1'320	...	..
73	... ..	+ 1'5339	+ 0'0073	...	- 16'214	+ 0'141	..	..
74	... ..	+ 1'8275	+ 0'0016	...	- 10'048	+ 0'107	...	..
75	β Arietis ...	+ 3'2420	+ 0'0137	+ 0'017	- 15'955	+ 0'294	+ 0'009	793
76	849 Lacaille 1st ...	+ 1'6056	+ 0'0071	..	- 15'586	+ 0'164	...	...
77	849 Lacaille 2nd ...	+ 1'6049	+ 0'0071	...	- 15'582	+ 0'164	...	..
78	δ Ceti γ ...	+ 3'1111	+ 0'0094	- 0'011	- 15'575	+ 0'294	+ 0'19	837
79	β Arietis ...	+ 3'2503	+ 0'0137	+ 0'008	- 15'503	+ 0'308	+ 0'10	844
80	868 Lacaille ...	+ 1'7476	+ 0'0040	...	- 15'448	+ 0'170	...	...
81	... ..	+ 1'6726	+ 0'0067	...	- 15'178	+ 0'167	...	..
82	... ..	+ 1'6522	+ 0'0062	..	- 15'110	+ 0'165	...	..
83	... ..	+ 3'2844	+ 0'0144	...	- 15'066	+ 0'322	...	...
84	δ Arietis ϵ ...	+ 3'4172	+ 0'0135	- 0'001	- 14'704	+ 0'343	+ 0'02	924
85	... ..	+ 1'4718	+ 0'0026	...	- 14'647	+ 0'153	...	...
86	δ Ceti α ...	+ 3'1293	+ 0'0098	- 0'002	- 14'480	+ 0'323	+ 0'11	949
87	ρ Persei Var. 2 ...	+ 3'8070	+ 0'0332	+ 0'010	- 14'402	+ 0'393	+ 0'11	953
88	β Persei Var. 1 ...	+ 3'8746	+ 0'0356	- 0'002	- 14'226	+ 0'406	- 0'01	963
89	1047 Taylor ...	+ 1'3440	+ 0'0139	...	- 14'191	+ 0'145	...	968
90	β R. P. L. ...	+ 12'7618	+ 1'5797	...	- 14'150	+ 1'325	+ 0'08	960
91	δ Arietis δ ...	+ 3'4067	+ 0'0171	+ 0'010	- 13'945	+ 0'364	0'00	996
92	... ..	+ 3'2110	+ 0'0012	...	- 13'377	+ 0'246	...	...
93	δ Arietis γ^1 ...	+ 3'4485	+ 0'0175	- 0'001	- 13'333	+ 0'352	+ 0'03	1084
94	... ..	+ 1'3243	+ 0'0138	...	- 13'235	+ 0'151	...	...
95	γ Tauri ϵ ...	+ 3'2245	+ 0'0115	...	- 13'062	+ 0'363	...	1067
96	... ..	+ 1'3441	+ 0'0131	...	- 12'972	+ 0'166	...	..
97	γ Persei Var. 3 ...	+ 3'7980	+ 0'0273	...	- 12'601	+ 0'432	...	..
98	... ..	+ 3'1042	+ 0'0089	...	- 12'761	+ 0'355	...	..
99	... ..	+ 3'1105	+ 0'0089	...	- 12'494	+ 0'360	...	...
100	1193 Lacaille ...	+ 1'4363	+ 0'0105	...	- 11'842	+ 0'174	...	...
101	1200 Lacaille ..	+ 1'4247	+ 0'0107	...	- 11'761	+ 0'173	...	...
102	... ..	+ 1'8360	+ 0'0044	...	- 11'641	+ 0'223	...	...
103	β Tauri η ...	+ 3'5513	+ 0'0177	- 0'001	- 11'551	+ 0'430	+ 0'06	1166
104	... ..	+ 3'3398	+ 0'0124	...	- 11'182	+ 0'410	..	..
105	δ Eridani γ^1 ...	+ 2'7916	+ 0'0047	+ 0'002	- 10'655	- 0'350	+ 0'12	1234

75.—87.—Proper Motions adopted from "Greenwich Catalogues."

90.—Proper Motion in Polar Distance from "Radcliffe Polar List for 1855."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
106	... ..	10.0	1	3	53	296	128	25	35.7	1	0.50
107	35 Tauri λ Var. 1	4.5	...	3	53	5.59	77	54	7.4	2	0.02
108	... ..	8.1	1	3	53	38.68	143	8	33.2	1	0.95
109	37 Tauri λ^1	4.7	...	3	56	35.88	68	17	46.3	3	0.57
110	7591 Lalande	9.0	1	3	58	10.39	74	52	31.1	2	0.10
111	... ..	10.2	2	4	3	20.50	63	30	27.8	2	0.40
112	7764 Lalande	8.4	2	4	3	24.92	74	44	1.5	2	0.10
113	... ..	9.2	1	4	3	41.01	146	56	38.5	1	0.90
114	38 Eridani ϵ^1	4.4	...	4	5	10.72	97	11	51.6	2	0.50
115	1418 Lacaille	8.1	2	4	12	25.54	143	39	54.7	2	0.43
116	... ..	8.0	2	4	13	44.15	70	51	40.4	2	0.92
117	... ..	9.5	2	4	15	37.69	128	39	58.4	2	0.09
118	... ..	8.7	1	4	16	44.94	149	4	34.4	1	0.98
119	74 Tauri ϵ ...	3.7	...	4	20	37.19	71	7	36.8	11	0.34
120	... ..	10.2	1	4	21	58.85	50	28	12.0	1	0.18
121	1520 Lacaille	8.7	1	4	26	39.65	147	29	8.1	1	0.95
122	87 Tauri α (Aldebaran)	1.0	...	4	28	3.73	73	46	10.8	11	0.35
123	... ..	9.0	2	4	23	26.08	140	14	23.0	2	0.07
124	... ..	9.4	2	4	31	41.27	142	59	42.6	2	0.51
125	... ..	9.5	1	4	32	54.96	130	48	31.1	2	0.09
126	1566 Lacaille	8.0	1	4	35	44.77	148	28	31.1	1	0.96
127	... ..	9.5	2	4	36	15.84	64	19	23.1	2	0.90
128	1663 Taylor	8.0	1	4	36	48.54	138	48	10.4	1	0.05
129	... ..	9.5	1	4	39	29.24	128	57	40.0	2	0.08
130	1598 Lacaille	7.5	2	4	41	35.30	128	21	44.8	2	0.54
131	... ..	9.6	2	4	43	18.73	130	41	20.0	2	0.51
132	97 Tauri δ	5.5	...	4	43	21.03	71	23	49.7	2	0.97
133	1625 Lacaille	8.3	2	4	44	57.42	140	1	54.0	2	0.06
134	... ..	8.9	2	4	45	26.91	129	26	9.0	2	0.09
135	3 Aurigæ ϵ	3.0	...	4	48	4.45	57	3	16.9	2	0.06
136	1761 Taylor	7.5	1	4	49	57.63	129	18	43.3	1	0.06
137	7 Aurigæ ϵ Var. 1	3.5	...	4	52	8.56	46	23	0.7	2	0.09
138	1780 Taylor	9.0	1	4	53	15.45	141	38	53.0	1	0.06
139	... ..	9.0	1	4	53	17.06	129	39	57.2	1	0.06
140	R Leporis Var. 1	6.3	2	4	53	22.12	105	0	54.4	3	0.02

107.— λ Tauri Var. 1.—Period, 3.95 days.—Range, 3.5 to 4.3 magnitude.

110 and 112.—Comparison stars for Asia in 1862.

137.— ϵ Aurigæ Var. 1.—Supposed to be irregularly variable.

140.—R Leporis Var. 1.—Period, 438 days.—Range, 6th. to 9th. magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
106	... ..	+ 2.1699	+ 0.0080	...	- 10.650	+ 0.274	...	...
107	35 Tauri λ Var. 1	+ 3.3159	+ 0.0116	...	- 10.546	+ 0.416	...	1241
108	... ..	+ 1.5528	+ 0.0082	...	- 10.505	+ 0.208	...	...
109	37 Tauri λ^1 ...	+ 3.5290	+ 0.0153	+ 0.004	- 10.284	+ 0.416	+ 0.00	1257
110	7581 Lalande	+ 3.3836	+ 0.0124	...	- 10.166	+ 0.430	...	...
111	... ..	+ 3.6318	+ 0.0147	...	- 9.773	+ 0.454	..	..
112	7764 Lalande	+ 3.3909	+ 0.0121	...	- 9.767	+ 0.436	...	..
113	... ..	+ 1.2706	+ 0.0290	...	- 9.747	+ 0.167	...	...
114	38 Eridani α^1	+ 2.9239	+ 0.0058	- 0.002	- 9.632	+ 0.379	- 0.07	1290
115	1418 Lacaille	+ 1.4509	+ 0.0069	...	- 9.072	+ 0.196	...	...
116	... ..	+ 3.4870	+ 0.0128	...	- 8.909	+ 0.459	..	..
117	... ..	+ 2.1111	+ 0.0035	...	- 8.821	+ 0.291	..	..
118	... ..	+ 1.0628	+ 0.0146	...	- 8.733	+ 0.144	..	..
119	74 Tauri ϵ	+ 3.4868	+ 0.0120	+ 0.005	- 8.427	+ 0.468	+ 0.03	1376
120	... ..	+ 3.2762	+ 0.0090	...	- 8.319	+ 0.439	...	...
121	1520 Lacaille	+ 1.1162	+ 0.0122	...	- 7.944	+ 0.157	...	...
122	57 Tauri α ...	+ 3.4303	+ 0.0097	+ 0.004	- 7.831	+ 0.464	+ 0.17	1420
123	... ..	+ 1.5915	+ 0.0120	...	- 7.801	+ 0.217	..	...
124	... ..	+ 1.4283	+ 0.0082	..	- 7.538	+ 0.196	...	...
125	... ..	+ 2.0000	+ 0.0040	...	- 7.438	+ 0.274	..	..
126	1566 Lacaille	+ 1.0350	+ 0.0123	...	- 7.308	+ 0.144	..	..
127	... ..	+ 3.6724	+ 0.0130	...	- 7.166	+ 0.503	...	...
128	1053 Taylor	+ 1.6440	+ 0.0059	..	- 7.121	+ 0.227	...	...
129	... ..	+ 2.0571	+ 0.0037	...	- 6.902	+ 0.285	..	...
130	1598 Lacaille	+ 2.0753	+ 0.0036	...	- 6.728	+ 0.288	...	...
131	... ..	+ 1.9862	+ 0.0035	..	- 6.586	+ 0.277	..	..
132	97 Tauri δ	+ 3.4972	+ 0.0100	+ 0.003	- 6.583	+ 0.485	+ 0.07	1493
133	1625 Lacaille	+ 1.5616	+ 0.0063	..	- 6.451	+ 0.219	..	...
134	... ..	+ 2.0307	+ 0.0037	..	- 6.410	+ 0.294	..	..
135	3 Aurigæ ϵ ...	+ 3.8961	+ 0.0144	- 0.006	- 6.191	+ 0.544	+ 0.02	1520
136	1761 Taylor	+ 2.0290	+ 0.0033	..	- 6.045	+ 0.600	..	...
137	7 Aurigæ ϵ Var. 1	+ 4.2306	+ 0.0199	0.000	- 5.852	+ 0.602	0.00	1540
138	1750 Taylor	+ 1.2691	+ 0.0084	..	- 5.812	+ 0.150	...	...
139	... ..	+ 2.0116	+ 0.0038	..	- 5.840	+ 0.284	..	...
140	R Leporis Var. 1	+ 2.7285	+ 0.0028	...	- 5.749	+ 0.382	...	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
141	102 Tauri	4.9	...	4	54	54.06	69	36	35.9	1	0.97
142	"	9.1	3	4	55	54.53	130	17	46.1	3	0.10
143	1811 Taylor	6.5	1	4	57	1.08	129	55	8.7	1	0.06
144	1705 Lacaille	8.1	2	4	57	23.58	129	16	37.6	2	0.53
145	2 Leporis	3.7	...	4	59	39.73	112	33	27.0	6	0.07
146	15 Orionis	6.0	...	5	1	51.48	74	34	52.9	2	0.90
147	"	0.0	2	5	6	0.27	131	45	47.3	2	0.09
148	13 Aurigæ (Capella)	1.0	...	5	6	34.36	44	8	28.4	1	0.12
149	"	8.3	2	5	6	50.01	129	6	7.0	2	0.09
150	19 Orionis β (Rigel)	1.0	...	5	7	57.22	98	21	47.2	4	0.28
151	"	9.4	2	5	12	49.82	129	40	10.0	2	0.09
152	1822 Lacaille	7.9	2	5	15	41.40	141	43	17.0	2	0.09
153	112 Tauri β	2.0	...	5	17	37.95	61	30	44.2	7	0.07
154	"	8.7	3	5	18	40.04	129	58	4.4	3	0.37
155	"	9.5	1	5	19	43.42	131	3	57.6	1	0.06
156	34 Orionis δ Var. 1	2.0	...	5	25	0.51	90	24	14.0	7	0.20
157	11 Leporis α	3.0	...	5	26	41.36	107	55	22.3	5	0.08
158	46 Orionis ϵ	2.0	...	5	29	15.75	91	17	33.5	3	0.07
159	123 Tauri 3	3.5	...	5	29	27.46	68	56	41.2	1	0.08
160	"	9.2	2	5	31	35.74	128	42	17.6	3	0.67
161	"	9.2	2	5	32	39.85	128	41	17.9	2	0.53
162	α Columbae	2.0	...	5	34	41.37	124	8	56.9	5	0.08
163	2113 Taylor	8.5	1	5	35	6.11	130	45	36.7	1	0.03
164	"	9.2	1	5	36	41.64	129	57	52.4	1	0.13
165	"	9.0	1	5	38	21.66	130	5	27.8	2	0.09
166	1984 Lacaille	7.8	2	5	40	39.87	130	15	20.9	2	0.08
167	54 Orionis χ^1	5.0	...	5	46	16.18	69	45	11.9	2	0.57
168	2036 Lacaille	8.1	2	5	46	18.77	129	47	15.5	2	0.53
169	58 Orionis α Var. 2	1.0	...	5	47	45.30	82	37	18.5	12	0.22
170	"	9.4	1	5	49	34.77	130	1	20.8	1	0.12
171	"	9.0	1	5	52	39.45	129	33	35.1	1	0.12
172	"	8.0	1	5	53	14.79	131	7	15.1	2	0.08
173	2104 Lacaille	8.1	2	5	54	20.14	143	26	24.5	2	0.09
174	62 Orionis χ^2	5.0	...	5	55	47.02	69	51	45.1	1	0.98
175	"	9.3	2	5	56	7.47	129	57	12.8	2	0.09

156.— δ Orionis Var. 1.—Supposed to vary irregularly from 2.3 to 2.7 magnitude.160.— α Orionis Var. 2.—(*Betelgeuse*).—Irregularly variable from 1.0 to 1.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
141	102 Tauri ϵ ...	+ 3.5748	+ 0.0095	+ 0.004	- 5.020	+ 0.503	+ 0.06	1551
142	... ..	+ 1.9824	+ 0.0038	...	- 5.535	+ 0.280	...	...
143	1811 Taylor ...	+ 1.9954	+ 0.0038	...	- 5.442	+ 0.282	...	1561
144	1705 Lacaille ...	+ 2.0191	+ 0.0037	...	- 5.411	+ 0.286	..	...
145	2 Leporis ϵ ...	+ 2.5357	+ 0.0033	+ 0.001	- 5.219	+ 0.359	+ 0.08	1575
146	15 Orionis ...	+ 3.4290	+ 0.0074	- 0.001	- 5.033	+ 0.486	- 0.03	1591
147	.. ..	+ 1.0110	+ 0.0106	...	- 4.681	+ 0.273	...	...
148	13 Aurigæ α ...	+ 4.4121	+ 0.0173	+ 0.008	- 4.633	+ 0.028	+ 0.43	1613
149	.. ..	+ 2.0145	+ 0.0035	...	- 4.611	+ 0.288	...	...
150	19 Orionis β ...	+ 2.8804	+ 0.0040	- 0.001	- 4.515	+ 0.412	+ 0.02	1623
151	... ..	+ 1.9866	+ 0.0035	...	- 4.099	+ 0.286	..	...
152	1822 Lacaille ..	+ 1.4098	+ 0.0057	...	- 3.853	+ 0.204	...	..
153	112 Tauri β ...	+ 3.7852	+ 0.0082	+ 0.003	- 3.686	+ 0.545	+ 0.20	1681
154	... ..	+ 1.9696	+ 0.0034	...	- 3.596	+ 0.285	..	...
155	.. ..	+ 1.9251	+ 0.0035	...	- 3.506	+ 0.279	...	..
156	31 Orionis δ Var. 1	+ 3.0626	+ 0.0038	+ 0.001	- 3.050	+ 0.443	+ 0.04	1730
157	11 Leporis α ...	+ 2.6441	+ 0.0029	+ 0.001	- 2.905	+ 0.383	0.00	1741
158	46 Orionis ϵ ...	+ 3.0421	+ 0.0035	- 0.002	- 2.682	+ 0.441	+ 0.01	1765
159	123 Tauri 3 ..	+ 3.5822	+ 0.0055	0.000	- 2.605	+ 0.519	+ 0.05	1767
160	... ..	+ 2.0089	+ 0.0031	..	- 2.480	+ 0.292	...	...
161	... ..	+ 2.0089	+ 0.0030	..	- 2.387	+ 0.292	..	...
162	α Columbe ...	+ 2.1705	+ 0.0027	+ 0.005	- 2.211	+ 0.316	+ 0.05	1802
163	2113 Taylor ...	+ 1.9264	+ 0.0031	..	- 2.174	+ 0.290	..	...
164	... ..	+ 1.9573	+ 0.0030	..	- 2.036	+ 0.285	..	...
165	... ..	+ 1.9515	+ 0.0030	..	- 1.891	+ 0.284	..	...
166	1984 Lacaille ...	+ 1.9440	+ 0.0030	...	- 1.690	+ 0.284	..	...
167	54 Orionis χ^1 ...	+ 3.5641	+ 0.0034	...	- 1.201	+ 0.520	...	1876
168	2036 Lacaille ...	+ 1.9605	+ 0.0028	..	- 1.198	+ 0.286	...	...
169	58 Orionis α Var. 2	+ 3.2449	+ 0.0028	+ 0.001	- 1.070	+ 0.467	0.00	1883
170	... ..	+ 1.9504	+ 0.0027	..	- 0.912	+ 0.284	..	..
171	... ..	+ 1.9687	+ 0.0026	..	- 0.643	+ 0.287	...	...
172	... ..	+ 1.9033	+ 0.0026	...	- 0.590	+ 0.278	..	...
173	2104 Lacaille ...	+ 1.2694	+ 0.0073	..	- 0.496	+ 0.199	..	..
174	62 Orionis χ^2 ...	+ 3.5613	+ 0.0022	..	- 0.369	+ 0.519	..	1909
175	... ..	+ 1.9521	+ 0.0025	..	- 0.310	+ 0.285	..	...

145.—Proper Motions adopted from "*Greenwich Catalogue*."

162.—Proper Motions adopted from "*Stone's Catalogue*."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year
				h.	m.	s.	°	'	"		
176	2301 Taylor	6.3	1	5	59	28.90	148	6	20.5	1	0.96
177	"	8.2	1	5	59	38.92	129	49	47.9	2	0.51
178	67 Orionis	5.0	...	5	59	44.99	75	13	7.5	12	0.00
179	"	8.8	2	6	3	37.31	129	58	11.0	2	0.14
180	"	7.4	2	6	4	20.20	128	2	33.6	2	0.12
181	7 Geminorum η Var. 6 ..	3.5	...	6	6	36.42	67	27	26.8	3	0.63
182	"	9.0	1	6	8	47.72	131	54	43.0	2	0.08
183	"	9.0	...	6	8	51.34	130	31	34.1	1	0.13
184	13 Geminorum μ	3.0	...	6	14	40.38	67	25	11.7	7	0.22
185	"	9.4	2	6	21	54.56	129	36	27.5	2	0.14
186	2524 Taylor	7.5	1	6	23	26.01	131	3	1.3	1	0.08
187	24 Geminorum γ	2.3	...	6	29	47.81	73	29	14.6	12	0.14
188	"	9.0	2	6	31	24.39	140	0	9.3	2	0.05
189	"	9.0	2	6	33	51.92	130	54	14.3	2	0.09
190	"	7.7	1	6	34	28.58	130	27	51.9	1	0.15
191	51 Cephei (Hec.)	5.3	...	6	35	8.54	2	45	16.3	8	0.10
192	"	8.9	2	6	36	11.08	130	20	57.4	2	0.12
193	31 Geminorum δ	3.7	...	6	37	35.89	76	57	36.2	2	0.16
194	9 Can. Maj. α (Sirius) ..	1.0	...	6	39	6.56	106	32	51.7	1	0.01
195	"	8.9	2	6	42	21.47	130	56	52.0	2	0.15
196	"	8.8	2	6	43	38.68	128	30	19.6	2	0.07
197	2724 Taylor	8.9	2	6	44	52.12	144	35	58.6	2	0.08
198	2500 Lacaille	7.9	1	6	46	57.71	130	23	14.8	1	0.16
199	2516 Lacaille	8.2	1	6	48	21.53	130	31	34.6	2	0.14
200	"	9.3	1	6	49	40.68	129	8	13.8	1	0.15
201	21 Canis Majoris ϵ	1.7	...	6	53	14.53	118	47	16.6	6	0.09
202	"	9.0	1	6	53	15.82	129	47	27.6	1	0.15
203	2806 Taylor	7.6	1	6	55	55.22	69	12	25.2	1	0.12
204	43 Gem. 3 ^d Var. 1	4.0	...	6	55	58.86	69	13	50.7	4	0.31
205	23 Canis Majoris γ	4.5	...	6	57	33.93	106	26	0.6	7	0.14
206	R Geminorum Var. 2	7.7	3	6	59	6.33	67	5	20.3	3	0.08
207	"	9.0	1	6	59	8.11	66	59	50.1	1	0.04
208	"	7.8	1	6	59	47.20	129	42	59.4	1	0.13
209	2451 Taylor	7.8	1	7	0	48.71	145	44	43.8	1	0.19
210	R Canis Minoris Var. 1 ..	8.4	3	7	1	10.40	79	45	46.5	3	0.11

181.— η Geminorum Var. 6. —Period, 229 days.—Range, 3rd to 4th. magnitude.

204.—3 Geminorum Var. 1. —Period, 10.16 days.—Range, 3.7 to 4.5 magnitude.

206.—R Geminorum Var. 2. —Period, 371 days.—Range, 7th magnitude to invisibility.

210.—R Canis Minoris Var. 1. —Period, 333 days.—Range, 7.5 to 11th. magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
176	2301 Taylor . . .	+ 0.9235	+ 0.0030	..	- 0.132	+ 0.135	..	1954
177	... ..	+ 1.9568	+ 0.0024	..	- 0.031	+ 0.285	..	..
178	67 Orionis ν	+ 3.4248	+ 0.0017	+ 0.001	- 0.022	+ 0.500	+ 0.02	1958
179	... ..	+ 1.9515	+ 0.0023	..	+ 0.317	+ 0.285	..	..
180	... ..	+ 2.0261	+ 0.0023	..	+ 0.379	+ 0.296	..	..
181	7 Gem. γ Var. 6 ..	+ 3.6267	+ 0.0007	- 0.007	+ 0.578	+ 0.529	+ 0.02	2002
182	... ..	+ 1.8728	+ 0.0021	..	+ 0.769	+ 0.273	..	..
183	... ..	+ 1.9300	+ 0.0021	..	+ 0.774	+ 0.281	..	..
184	13 Geminorum μ ..	+ 3.6268	- 0.0003	+ 0.005	+ 1.283	+ 0.527	+ 0.14	2047
185	... ..	+ 1.9707	+ 0.0018	..	+ 1.914	+ 0.285	..	..
186	2524 Taylor	+ 1.9138	+ 0.0018	..	+ 2.047	+ 0.277	..	..
187	24 Geminorum γ ...	+ 3.4650	- 0.0015	+ 0.001	+ 2.600	+ 0.500	+ 0.04	2163
188	... ..	+ 1.4935	+ 0.0007	..	+ 2.740	+ 0.215	..	..
189	... ..	+ 1.9264	+ 0.0015	..	+ 2.953	+ 0.277	..	..
190	... ..	+ 1.9445	+ 0.0015	..	+ 3.006	+ 0.280	..	..
191	51 Cephei (Hev.) ..	+ 30.6365	- 1.8025	- 0.027	+ 3.063	+ 4.400	+ 0.08	2157
192	... ..	+ 1.9503	+ 0.0014	..	+ 3.154	+ 0.280	..	..
193	31 Geminorum ξ ..	+ 3.3776	- 0.0016	- 0.007	+ 3.275	+ 0.485	+ 0.22	2206
194	9 Can. Maj. α	+ 2.6808	+ 0.0010	- 0.035	+ 3.405	+ 0.384	+ 1.24	2213
195	... ..	+ 1.9317	+ 0.0013	..	+ 3.686	+ 0.275	..	..
196	... ..	+ 2.0276	+ 0.0013	..	+ 3.796	+ 0.288	..	..
197	2724 Taylor	+ 1.2267	- 0.0030	..	+ 3.001	+ 0.173	..	..
198	2500 Lacaille... ..	+ 1.9585	+ 0.0012	..	+ 4.081	+ 0.278	..	..
199	2516 Lacaille	+ 1.9545	+ 0.0012	..	+ 4.201	+ 0.277	..	..
200	... ..	+ 2.0095	+ 0.0013	..	+ 4.313	+ 0.284	..	..
201	21 Can. Maj. ϵ	+ 2.3570	+ 0.0013	0.000	+ 4.617	+ 0.332	+ 0.02	2298
202	... ..	+ 1.9890	+ 0.0012	..	+ 4.662	+ 0.281	..	..
203	2805 Taylor	+ 3.5647	- 0.0050	..	+ 4.849	+ 0.502	..	..
204	43 Gem. 3 ^d Var. 1 ..	+ 3.5641	- 0.0070	- 0.001	+ 4.850	+ 0.503	+ 0.01	2306
205	23 Can. Maj. γ	+ 2.7144	+ 0.0005	+ 0.002	+ 4.984	+ 0.381	+ 0.01	2319
206	R Gem. Var. 2	+ 3.6184	- 0.0059	..	+ 5.115	+ 0.505	..	..
207	... ..	+ 3.6209	- 0.0059	..	+ 5.118	+ 0.509	..	..
208	... ..	+ 1.9990	+ 0.0011	..	+ 5.173	+ 0.290	..	..
209	2551 Taylor	+ 1.1774	- 0.0033	..	+ 5.259	+ 0.164	..	..
210	R Can. Min. Var. 1 ..	+ 3.3050	- 0.0031	..	+ 5.290	+ 0.463	..	..

178.—191.—193.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h	m.	s.	"	"	"		
211	... ..	9.0	1	7	4	55.62	130	42	26.1	1	0.20
212	2909 Taylor	8.3	1	7	5	45.61	130	8	42.2	1	0.10
213	... ..	9.0	1	7	5	49.92	129	23	7.9	1	0.16
214	... ..	7.3	1	7	6	36.63	129	2	39.0	1	0.15
215	2696 Lacaille	8.4	2	7	9	20.62	140	58	45.6	2	0.09
216	2940 Taylor	8.5	1	7	9	20.25	129	57	35.9	1	0.05
217	54 Geminorum A	4.3	...	7	10	13.09	73	12	57.4	1	0.60
218	... ..	9.5	1	7	10	14.44	131	52	5.3	1	0.20
219	55 Geminorum B	3.3	...	7	11	56.31	67	46	8.7	17	0.14
220	... ..	9.5	1	7	12	59.12	129	15	51.3	1	0.16
221	... ..	8.0	1	7	14	23.97	138	49	29.4	1	0.20
222	... ..	8.7	2	7	17	22.77	129	13	19.5	2	0.09
223	... ..	9.7	2	7	18	1.88	129	42	28.0	2	0.15
224	3043 Taylor	7.1	2	7	19	11.84	129	16	18.9	2	0.15
225	2807 Lacaille	8.0	1	7	19	31.07	142	15	14.6	2	0.09
226	... ..	9.0	1	7	19	33.48	123	7	52.1	1	0.21
227	... ..	7.0	1	7	21	32.00	131	50	19.2	1	0.20
228	S Canis Minoris Var. 2	9.8	3	7	25	16.94	81	23	34.4	3	0.14
229	68 Geminorum	6.5	1	7	25	47.23	73	52	54.7	2	0.11
230	66 Gem. α^1 (Castor)	1.7	...	7	25	51.25	57	48	53.8	12	0.15
231	... ..	9.0	1	7	26	2.73	142	5	45.3	1	0.05
232	... ..	9.2	1	7	26	46.17	123	7	15.0	1	0.21
233	3126 Taylor	7.5	1	7	29	32.74	143	15	35.0	1	0.03
234	10 Can. Min. α (Procyon), ...	1.0	...	7	32	7.72	84	25	37.3	15	0.16
235	2593 Lacaille	8.0	1	7	32	41.06	121	49	18.1	1	0.04
236	2910 Lacaille	8.5	1	7	33	16.04	143	52	47.6	1	0.05
237	... ..	8.5	1	7	35	27.00	144	19	34.5	1	0.05
238	78 Gem. β (Pollux)	1.3	...	7	36	55.73	61	38	47.2	10	0.15
239	... ..	7.5	2	7	37	44.51	128	52	45.3	2	0.03
240	81 Geminorum γ	5.0	...	7	38	11.35	71	9	33.0	2	0.12
241	2971 Lacaille	7.5	1	7	40	16.90	143	54	47.6	1	0.05
242	T Geminorum Var. 4	5.3	2	7	41	4.50	65	55	40.7	2	0.09
243	... ..	8.0	1	7	41	30.83	144	18	31.0	1	0.06
244	3013 Lacaille	7.0	1	7	43	27.42	112	0	32.0	1	0.06
245	40 R. P. L.	6.5	...	7	43	39.66	5	33	32.7	1	0.09

228.—S Canis Minoris Var. 2.—Period 232 days.—Range, 7.5 magnitude to invisibility.

242.—T. Geminorum Var. 4.—Period 228 days.—Range, 5.5 magnitude to invisibility.

245.—1359 Groombridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
211	... ..	+ 1.9676	+ 0.0009	...	+ 5.606	+ 0.274	...	..
212	2890 Taylor ...	+ 1.9905	+ 0.0009	...	+ 5.676	+ 0.277	...	...
213	... ..	+ 2.0193	+ 0.0010	...	+ 5.682	+ 0.280	...	...
214	... ..	+ 2.0332	+ 0.0010	...	+ 5.748	+ 0.282	...	...
215	2696 Lacaille	+ 1.9971	- 0.0018	...	+ 5.976	+ 0.205	...	...
216	2940 Taylor...	+ 2.0028	+ 0.0010	...	+ 5.984	+ 0.276	...	..
217	54 Geminorum λ	+ 3.4566	- 0.0055	...	+ 6.049	+ 0.602	...	2398
218	... ..	+ 1.9296	+ 0.0007	...	+ 6.050	+ 0.265	...	...
219	55 Geminorum δ	+ 3.5918	- 0.0072	0.000	+ 6.193	+ 0.495	+ 0.02	2410
220	.. ..	+ 2.0311	+ 0.0009	...	+ 6.280	+ 0.279	...	...
221	... ..	+ 1.6234	- 0.0008	...	+ 6.403	+ 0.221	...	...
222	... ..	+ 2.0124	+ 0.0009	...	+ 6.614	+ 0.278	...	...
223	... ..	+ 2.0255	+ 0.0010	...	+ 6.697	+ 0.276	...	...
224	3013 Taylor ...	+ 2.0435	+ 0.0009	...	+ 6.792	+ 0.277	...	..
225	2907 Lacaille	+ 1.4480	- 0.0023	...	+ 6.819	+ 0.196	...	...
226	... ..	+ 2.2515	+ 0.0013	...	+ 6.823	+ 0.304	...	...
227	... ..	+ 1.9500	+ 0.0006	..	+ 6.955	+ 0.264	...	...
228	8 Can. Min. Var. 2	+ 3.2696	- 0.0014	...	+ 7.293	+ 0.440	...	...
229	68 Geminorum	+ 3.4317	- 0.0066	- 0.004	+ 7.333	+ 0.463	0.00	2446
230	66 Geminorum α^1	+ 3.5551	- 0.0133	- 0.013	+ 7.339	+ 0.519	+ 0.08	2445
231	... ..	+ 1.4744	- 0.0024	...	+ 7.354	+ 0.197	...	..
232	... ..	+ 2.2616	+ 0.0011	...	+ 7.413	+ 0.303	...	..
233	3126 Taylor ...	+ 1.4160	- 0.0032	...	+ 7.638	+ 0.188	..	2507
234	10 Can. Min. α	+ 3.1929	- 0.0041	- 0.048	+ 7.846	+ 0.423	+ 1.08	2522
235	2893 Lacaille	+ 2.3094	+ 0.0012	...	+ 7.891	+ 0.307	..	..
236	2910 Lacaille	+ 1.3896	- 0.0037	...	+ 7.938	+ 0.183	...	...
237	... ..	+ 1.3648	- 0.0041	...	+ 8.114	+ 0.179	...	..
238	78 Geminorum β	+ 3.7299	- 0.0128	- 0.040	+ 8.231	+ 0.491	+ 0.06	2555
239	... ..	+ 2.0006	+ 0.0010	...	+ 8.297	+ 0.274	...	...
240	81 Geminorum γ	+ 3.4571	- 0.0086	- 0.008	+ 8.332	+ 0.459	+ 0.05	2558
241	2971 Lacaille ..	+ 1.4105	- 0.0038	...	+ 8.499	+ 0.182	...	..
242	T Gem. Var. 4	+ 3.6122	- 0.0110	...	+ 8.561	+ 0.472	...	..
243	... ..	+ 1.3904	- 0.0041	..	+ 8.596	+ 0.179	..	...
244	3013 Lacaille	+ 1.5317	- 0.0026	...	+ 8.749	+ 0.197	..	...
245	49 R. P. L.	+ 15.4282	- 1.2094	..	+ 8.765	+ 2.030	...	2585

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
246	... ..	8.0	1	7	45	4.57	129	24	42.4	2	0.08
247	1791 Brisbane	8.0	1	7	46	17.14	144	24	30.2	1	0.06
248	3293 Taylor	8.0	1	7	46	29.16	144	43	55.7	1	0.05
249	... ..	9.1	1	7	48	56.74	130	25	52.9	1	0.15
250	1 Cancri	6.0	...	7	49	12.66	73	50	48.4	1	0.09
251	... ..	8.5	2	7	49	49.19	129	17	12.9	2	0.06
252	... ..	9.0	...	7	50	2.96	129	39	10.1	1	0.13
253	3330 Taylor	8.0	1	7	51	48.84	144	10	45.2	1	0.05
254	... ..	9.0	1	7	52	52.87	144	41	30.7	1	0.05
255	6 Cancri	6.0	1	7	55	5.99	61	49	30.0	9	0.16
256	3373 Taylor	8.0	1	7	55	12.34	144	11	41.1	1	0.06
257	... ..	8.0	1	7	55	17.98	128	30	1.7	2	0.08
258	... ..	9.5	1	7	56	29.34	129	21	9.1	1	0.06
259	15 Argus ρ	3.0	...	8	1	42.66	113	54	41.6	6	0.15
260	... ..	9.7	1	8	1	59.94	113	46	37.3	1	0.20
261	... ..	9.2	2	8	2	9.72	123	39	16.3	3	0.10
262	16 Cancri 3	5.5	...	8	4	20.91	71	56	29.8	1	0.01
263	... ..	8.3	1	8	5	17.17	130	45	12.2	1	0.13
264	R Cancri Var. 1	7.7	3	8	9	0.61	77	51	21.7	3	0.09
265	... ..	9.3	2	8	9	20.90	74	15	51.8	3	0.24
266	... ..	9.3	1	8	9	51.95	74	16	2.7	1	0.21
267	16224 Lalande	7.0	1	8	10	30.18	73	54	0.8	1	0.21
268	... ..	8.3	1	8	12	15.14	128	43	30.2	1	0.12
269	... ..	8.8	1	8	12	43.23	128	40	43.7	1	0.11
270	... ..	9.3	1	8	12	53.61	131	17	0.3	1	0.13
271	... ..	9.5	1	8	12	55.26	130	45	19.7	1	0.13
272	... ..	9.5	1	8	13	40.21	133	17	7.4	1	0.20
273	20 Cancri δ	6.3	...	8	15	30.83	71	13	50.9	1	0.01
274	... ..	9.0	1	8	17	21.94	141	15	41.3	1	0.04
275	3620 Taylor	8.0	1	8	23	5.67	130	47	35.5	1	0.13
276	... ..	8.8	2	8	23	20.08	128	38	23.8	2	0.11
277	31 Cancri θ	5.3	...	8	23	47.14	71	26	44.0	1	0.17
278	33 Cancri η	5.7	...	8	24	40.94	69	5	46.4	8	0.17
279	3651 Taylor	7.7	1	8	25	37.47	130	3	8.0	1	0.13
280	... ..	9.0	1	8	26	23.33	130	30	15.1	1	0.08

246 — R Cancri Var. 1. — Period 354 days. — Range, 6th to 12th magnitude.
 265 — 266 — 267. — Comparison stars for Ariadne.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
246	... ..	+ 2.0668	+ 0.0010	...	+ 8.876	+ 0.269	...	...
247	1791 Brisbane	+ 1.4012	- 0.0043	...	+ 8.971	+ 0.179	...	...
248	3293 Taylor	+ 1.3820	- 0.0045	...	+ 9.987	+ 0.176	...	...
249	... ..	+ 2.0593	+ 0.0010	...	+ 9.178	+ 0.263	...	...
250	1 Cancri	+ 3.4162	- 0.0084	...	+ 9.109	+ 0.439	...	2630
251	... ..	+ 2.1015	+ 0.0011	...	+ 9.247	+ 0.263	...	...
252	... ..	+ 2.0896	+ 0.0011	...	+ 9.264	+ 0.266	...	...
253	3339 Taylor	+ 1.4297	- 0.0041	...	+ 9.401	+ 0.180	...	...
254	... ..	+ 1.4097	- 0.0053	...	+ 9.484	+ 0.177	...	...
255	6 Cancri	+ 3.6997	- 0.0148	- 0.005	+ 9.654	+ 0.463	+ 0.07	2672
256	3373 Taylor	+ 1.4479	- 0.0041	...	+ 9.662	+ 0.181	...	...
257	... ..	+ 2.1404	+ 0.0013	...	+ 9.669	+ 0.270	...	...
258	... ..	+ 2.1143	+ 0.0013	...	+ 9.761	+ 0.265	...	...
259	15 Argus ρ	+ 2.5608	+ 0.0009	- 0.007	+ 10.157	+ 0.318	- 0.06	2723
260	... ..	+ 2.5645	+ 0.0009	...	+ 10.178	+ 0.318	...	...
261	... ..	+ 2.1510	+ 0.0015	...	+ 10.191	+ 0.266	...	...
262	16 Cancri 3	+ 3.4454	+ 0.0103	+ 0.004	+ 10.355	+ 0.426	+ 0.11	2744
263	... ..	+ 2.0877	+ 0.0013	...	+ 10.426	+ 0.256	...	...
264	R Cancri Var. 1	+ 3.3154	- 0.0091	...	+ 10.703	+ 0.406	...	...
265	... ..	+ 3.3904	- 0.0095	...	+ 10.728	+ 0.413	...	...
266	... ..	+ 3.3898	- 0.0096	...	+ 10.763	+ 0.412	...	...
267	16224 Lalande	+ 3.3971	- 0.0097	...	+ 10.813	+ 0.412	...	...
268	... ..	+ 2.1735	+ 0.0018	...	+ 10.941	+ 0.261	...	...
269	... ..	+ 2.1763	+ 0.0018	...	+ 10.976	+ 0.261	...	...
270	... ..	+ 2.0900	+ 0.0015	...	+ 10.988	+ 0.250	...	...
271	... ..	+ 2.1053	+ 0.0011	...	+ 10.990	+ 0.252	...	...
272	... ..	+ 2.0209	+ 0.0013	...	+ 11.045	+ 0.241	...	...
273	20 Cancri d^1	+ 3.4493	+ 0.0114	...	+ 11.179	+ 0.413	...	2799
274	... ..	+ 1.6961	- 0.0014	...	+ 11.313	+ 0.199	...	...
275	3620 Taylor	+ 2.1360	+ 0.0020	...	+ 11.728	+ 0.248	...	...
276	... ..	+ 2.2050	+ 0.0023	...	+ 11.752	+ 0.256	...	...
277	31 Cancri θ	+ 3.4354	- 0.0118	- 0.006	+ 11.773	+ 0.401	+ 0.06	2853
278	33 Cancri η	+ 3.4841	- 0.0131	- 0.005	+ 11.844	+ 0.403	+ 0.06	2862
279	3631 Taylor	+ 2.1674	+ 0.0022	...	+ 11.903	+ 0.249	...	...
280	... ..	+ 2.1551	+ 0.0022	...	+ 11.957	+ 0.247	...	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
281	... ..	8.4	3	8	30	11.71	129	46	55.5	2	0.12
282	3710 Taylor	8.0	1	8	31	22.50	141	20	51.9	1	0.19
283	... ..	8.7	2	8	33	7.27	129	23	15.0	2	0.23
284	S Cancri Var. 2	8.5	4	8	36	6.39	70	28	32.6	4	0.13
285	3767 Taylor	8.5	1	8	36	18.59	149	50	2.8	1	0.17
286	47 Cancri δ	4.3	...	8	36	53.81	71	20	42.0	1	0.09
287	... ..	8.9	1	8	73	48.60	136	5	19.7	1	0.18
288	11 Hydrae ε	3.5	...	8	39	31.08	83	4	52.4	12	0.20
289	... ..	8.3	1	8	40	27.06	129	15	20.5	1	0.23
290	60 R. P. L.	6.5	...	8	46	8.72	5	16	42.0	6	0.36
291	S Hydrae Var. 3	10.3	3	8	46	25.20	86	24	59.2	3	0.23
292	... ..	9.6	1	8	47	18.74	69	36	57.0	1	0.20
293	3886 Taylor	8.0	1	8	48	12.00	136	52	39.3	1	0.18
294	T Cancri Var. 3	9.4	3	8	48	50.44	69	37	45.1	3	0.19
295	T Hydrae Var. 4	9.7	1	8	48	59.93	98	37	15.5	1	0.04
296	... ..	7.5	1	8	49	11.22	132	54	6.3	1	0.20
297	65 Cancri α	4.7	...	8	50	59.61	77	36	51.7	3	0.12
298	... ..	9.7	1	8	51	52.96	137	24	27.1	1	0.20
299	... ..	8.8	2	8	54	18.15	130	34	38.1	2	0.19
300	... ..	9.0	1	8	54	55.91	143	43	42.8	1	0.27
301	3941 Taylor	8.8	1	8	54	57.63	144	6	8.7	1	0.27
302	... ..	9.3	1	8	56	35.64	146	45	47.0	1	0.27
303	... ..	9.6	1	8	56	40.93	129	17	57.0	1	0.22
304	... ..	9.0	1	8	59	4.56	145	37	65.2	1	0.04
305	76 Cancri α	5.5	...	9	0	19.65	78	46	57.7	2	0.00
306	... ..	8.0	1	9	1	2.20	150	1	16.2	1	0.27
307	... ..	7.7	2	9	1	47.83	128	56	55.1	2	0.20
308	... ..	10.5	1	9	2	12.49	71	26	18.8	1	0.23
309	... ..	9.3	1	9	4	21.47	130	29	24.9	2	0.15
310	3713 Lacaille	7.8	1	9	4	32.87	143	48	57.3	1	0.28
311	... ..	8.4	2	9	6	25.16	142	29	13.1	2	0.08
312	... ..	8.9	1	9	6	25.79	138	41	16.6	1	0.17
313	... ..	9.0	1	9	8	12.53	148	14	1.3	1	0.17
314	... ..	10.8	2	9	9	21.67	73	52	24.7	2	0.19
315	83 Cancri	6.7	...	8	11	19.87	71	42	58.2	13	0.19

284.—S Cancri Var. 2.—Period 9.48 days.—Range, 5th to 10.8 magnitude.

290.—1286 Carrington.

292.—S Hydrae Var. 3.—Period 256 days.—Range, 8th to 13th magnitude.

294.—T Cancri Var. 3.—Period 494 days.—Range, 8th to 10.5 magnitude.

295.—T Hydrae Var. 4.—Period 289 days.—Range, 7th to 12th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
281	... ..	+ 2.2203	+ 0.0026	...	+ 12.223	+ 0.252	...	.
282	3710 Taylor ...	+ 1.7519	- 0.0006	...	+ 12.304	+ 0.197	...	...
283	... ..	+ 2.2103	+ 0.0026	...	+ 12.424	+ 0.248	...	...
284	S Cancri Var. 2	+ 3.4404	- 0.0130	...	+ 12.628	+ 0.385	...	...
285	3767 Taylor ...	+ 1.2862	- 0.0080	...	+ 12.642	+ 0.138	...	...
286	47 Cancri 3 ...	+ 3.4217	- 0.0125	- 0.002	+ 12.682	+ 0.382	+ 0.24	2953
287	... ..	+ 1.0006	+ 0.0019	...	+ 12.743	+ 0.220	...	...
288	11 Hydrae e ...	+ 3.1065	- 0.0071	- 0.013	+ 12.859	+ 0.351	+ 0.04	2971
289	... ..	+ 2.2364	+ 0.0031	...	+ 12.921	+ 0.244	...	...
290	60 R. P. L. ...	+ 13.0054	- 1.7367	...	+ 13.298	+ 1.512	...	...
291	S Hydrae Var. 3	+ 3.1347	- 0.0059	...	+ 13.310	+ 0.336	...	...
292	... ..	+ 3.4423	- 0.0140	...	+ 13.374	+ 0.368	...	...
293	3886 Taylor ...	+ 2.0120	+ 0.0025	...	+ 13.433	+ 0.212	...	...
294	T Cancri Var. 3	+ 3.4398	- 0.0141	...	+ 13.475	+ 0.366	...	...
295	T Hydrae Var. 4	+ 2.0220	- 0.0018	...	+ 13.485	+ 0.309	...	...
296	... ..	+ 2.1530	+ 0.0033	...	+ 13.493	+ 0.226	...	...
297	65 Cancri a ...	+ 3.2577	- 0.0098	0.000	+ 13.613	+ 0.346	+ 0.04	3055
298	... ..	+ 2.0079	+ 0.0027	...	+ 13.670	+ 0.208	...	...
299	... ..	+ 2.2426	+ 0.0039	...	+ 13.824	+ 0.231	...	...
300	... ..	+ 1.7997	+ 0.0005	...	+ 13.861	+ 0.194	...	...
301	3941 Taylor ..	+ 1.7375	- 0.0003	...	+ 13.866	+ 0.177	...	...
302	... ..	+ 1.0080	- 0.0026	...	+ 13.970	+ 0.162	...	...
303	... ..	+ 2.2572	+ 0.0040	...	+ 13.974	+ 0.233	...	...
304	... ..	+ 1.6840	- 0.0010	...	+ 14.124	+ 0.168	...	...
305	76 Cancri x ...	+ 3.2593	- 0.0094	- 0.002	+ 14.201	+ 0.335	0.00	3111
306	... ..	+ 1.4405	- 0.0062	...	+ 14.245	+ 0.142	...	...
307	... ..	+ 2.3140	+ 0.0044	...	+ 14.292	+ 0.231	...	...
308	... ..	+ 3.3565	+ 0.0133	...	+ 14.317	+ 0.340	...	...
309	... ..	+ 2.2804	+ 0.0047	...	+ 14.448	+ 0.225	...	...
310	3713 Lacaille	+ 1.8055	+ 0.0010	...	+ 14.460	+ 0.176	...	...
311	... ..	+ 1.8755	+ 0.0022	...	+ 14.573	+ 0.192	...	...
312	... ..	+ 2.0272	+ 0.0037	...	+ 14.576	+ 0.197	...	...
313	... ..	+ 1.6009	- 0.0025	...	+ 14.680	+ 0.153	...	...
314	... ..	+ 3.3335	+ 0.0019	...	+ 14.748	+ 0.324	...	...
315	83 Cancri ...	+ 3.3685	- 0.0134	- 0.012	+ 14.864	+ 0.323	+ 0.16	3171

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
316	...	8.5	...	9	11	46.21	130	44	53.2	1	0.15
317	...	8.9	3	9	14	32.62	24	50	14.1	3	0.12
318	...	9.2	1	9	15	13.69	143	43	26.1	1	0.28
319	...	9.2	2	9	15	49.94	25	4	11.1	2	0.13
320	...	9.0	1	9	16	3.90	140	7	19.9	1	0.17
321	...	9.5	1	9	16	15.59	139	0	47.4	1	0.17
322	0881 O. A. N	9.3	1	9	17	32.56	25	3	29.2	1	0.20
323	30 Hydre a Var. 1	2.3	...	9	20	51.25	98	4	0.1	13	0.23
324	2 Leonis α ..	6.0	...	9	21	7.29	80	10	56.3	1	0.17
325	3553 Lacaille	8.0	1	9	22	29.81	131	59	2.0	1	0.21
326	...	9.1	3	9	24	30.42	130	25	54.0	3	0.18
327	6 Leonis λ ...	6.0	1	9	24	36.20	79	40	54.5	1	0.32
328	3886 Lacaille	8.0	1	9	24	41.23	141	49	33.3	1	0.17
329	3887 Lacaille	8.0	1	9	24	53.13	140	0	16.9	1	0.17
330	...	9.0	1	9	26	53.60	144	57	51.3	1	0.18
331	...	8.8	1	9	28	52.41	128	46	39.2	1	0.22
332	...	8.0	1	9	28	58.85	128	49	16.2	1	0.23
333	10 Leonis ...	5.5	...	9	29	58.40	82	33	6.7	2	0.09
334	4259 Taylor	5.0	1	9	31	55.33	135	44	31.9	1	0.18
335	...	8.7	1	9	33	25.00	129	53	36.6	1	0.23
336	69 R. P. L.	8.0	...	9	32	32.26	2	46	30.6	1	0.81
337	...	8.2	1	9	32	51.36	129	47	14.2	1	0.13
338	14 Leonis o	4.0	...	9	33	50.25	79	29	10.3	4	0.16
339	...	9.0	...	9	34	41.56	130	34	22.9	1	0.13
340	4280 Taylor	8.0	1	9	34	42.40	142	19	28.7	1	0.17
341	17 Leonis ε	3.0	...	9	38	4.16	65	35	49.1	12	0.22
342	R Leonis Var. 1	8.6	4	9	40	11.14	77	56	10.3	5	0.20
343	...	8.0	1	9	42	39.64	130	47	31.0	1	0.15
344	...	8.9	1	9	43	22.16	143	45	57.4	1	0.17
345	...	8.0	1	9	44	3.77	147	1	19.8	1	0.19
346	...	9.3	1	9	45	53.44	129	2	34.2	1	0.23
347	70 R. P. L.	8.5	...	9	46	7.38	8	25	32.0	6	0.22
348	4402 Taylor	7.4	2	9	49	50.69	129	47	13.6	2	0.20
349	29 Leonis v	5.0	...	9	52	58.29	51	18	0.3	13	0.23
350	...	8.0	1	9	53	49.57	147	23	57.7	1	0.19

317-319-322.—Comparison stars for Comet 2 of 1861.

323.—α Hydre Var. 1.—Supposed to vary irregularly from 2.0 to 2.5 magnitude.

336.—1418 Carrington.

342.—R Leonis Var. 1.—Period 312 days.—Range, 5th to 10th magnitude.

347.—1451 Carrington.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in H. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
316	... ..	+ 2.3003	+ 0.0053	...	+ 14.890	+ 0.219	...	...
317	... ..	+ 4.9810	- 0.1139	...	+ 15.052	+ 0.473	...	...
318	... ..	+ 1.8723	+ 0.0027	...	+ 15.092	+ 0.174	...	...
319	... ..	+ 4.9487	- 0.1123	...	+ 15.126	+ 0.407	...	...
320	... ..	+ 2.0225	+ 0.0045	...	+ 15.139	+ 0.186	...	...
321	... ..	+ 2.0639	+ 0.0049	...	+ 15.151	+ 0.190	...	...
322	9881 O. A. N.	+ 4.9336	- 0.1164	...	+ 15.224	+ 0.461	...	...
323	30 Hydre a Var. 1	+ 2.9507	- 0.0013	- 0.004	+ 15.412	+ 0.269	- 0.08	3223
324	2 Leonis e	+ 3.2199	- 0.0087	...	+ 15.426	+ 0.293	...	3227
325	3853 Lacaille	+ 2.3088	+ 0.0063	...	+ 15.502	+ 0.207	...	...
326	... ..	+ 2.3571	+ 0.0064	...	+ 15.615	+ 0.209	...	...
327	6 Leonis A	+ 3.2248	- 0.0092	- 0.002	+ 15.619	+ 0.288	- 0.02	3251
328	3886 Lacaille	+ 2.0057	+ 0.0052	...	+ 15.624	+ 0.176	...	...
329	3887 Lacaille	+ 2.0739	+ 0.0057	...	+ 15.635	+ 0.182	...	...
330	... ..	+ 1.8906	+ 0.0038	...	+ 15.743	+ 0.164	...	...
331	... ..	+ 2.4141	+ 0.0067	...	+ 15.850	+ 0.209	...	...
332	... ..	+ 2.4134	+ 0.0068	...	+ 15.856	+ 0.208	...	...
333	10 Leonis	+ 3.1785	- 0.0077	...	+ 15.909	+ 0.276	...	3296
334	4259 Taylor	+ 3.1544	+ 0.0063	...	+ 16.012	+ 0.182	...	3300
335	... ..	+ 2.4011	+ 0.0072	...	+ 16.039	+ 0.203	...	...
336	69 R. P. L.	+ 19.6194	- 5.8156	...	+ 16.045	+ 1.710	...	...
337	... ..	+ 2.4053	+ 0.0072	...	+ 16.062	+ 0.203	...	...
338	14 Leonis e	+ 3.2197	- 0.0093	- 0.013	+ 16.113	+ 0.272	+ 0.04	3312
339	... ..	+ 2.3939	+ 0.0075	...	+ 16.158	+ 0.200	...	...
340	4280 Taylor	+ 2.0465	+ 0.0065	...	+ 16.158	+ 0.170	...	...
341	17 Leonis e	+ 3.4241	- 0.0180	- 0.004	+ 16.331	+ 0.282	+ 0.02	3331
342	R Leonis Var. 1	+ 3.2357	- 0.0101	...	+ 16.438	+ 0.263	...	3345
343	... ..	+ 2.4213	+ 0.0084	...	+ 16.560	+ 0.192	...	...
344	... ..	+ 2.0489	+ 0.0075	...	+ 16.604	+ 0.160	...	...
345	... ..	+ 1.9203	+ 0.0060	...	+ 16.630	+ 0.150	...	...
346	... ..	+ 2.4732	+ 0.0086	...	+ 16.718	+ 0.192	...	...
347	70 R. P. L.	+ 10.8353	- 1.5957	...	+ 16.729	+ 0.861	...	...
348	4102 Taylor	+ 2.4731	+ 0.0091	...	+ 16.907	+ 0.187	...	...
349	29 Leonis e	+ 3.1797	- 0.0081	- 0.008	+ 17.053	+ 0.236	+ 0.08	3415
350	... ..	+ 1.9940	+ 0.0066	...	+ 17.153	+ 0.143	...	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
351	... ..	8.0	1	9	56	24.14	144	3	33.7	1	0.20
352	4476 Taylor	8.9	1	9	57	49.75	146	35	45.6	1	0.17
353	31 Leonis A	5.0	...	10	0	37.82	79	19	58.0	2	0.17
354	32 Leonis α (<i>Regulus</i>)	1.3	...	10	1	4.34	77	21	53.2	20	0.24
355	4538 Taylor	7.0	...	10	6	6.78	129	19	7.2	1	0.23
356	.. ..	9.0	1	10	8	59.19	139	51	23.4	1	0.21
357	72 R. P. L.	6.0	...	10	9	10.79	5	3	20.2	4	0.50
358	4577 Taylor	9.0	1	10	9	45.00	129	36	39.0	2	0.24
359	41 Leonis γ^1	2.0	...	10	12	24.85	69	28	1.5	14	0.24
360	... ..	9.0	1	10	14	36.11	150	25	19.3	1	0.17
361	43 Leonis ...	6.5	...	10	15	50.04	82	45	46.0	2	0.10
362	... ..	9.0	1	10	16	9.40	129	15	55.9	1	0.23
363	44 Leonis ...	6.0	...	10	18	1.87	80	31	13.6	1	0.25
364	... ..	9.7	1	10	19	43.26	146	8	10.2	1	0.19
365	... ..	8.9	1	10	21	50.24	146	54	34.8	1	0.17
366	47 Leonis ρ	4.3	...	10	25	35.67	79	59	22.8	12	0.23
367	... ..	9.5	1	10	29	10.39	147	53	17.9	1	0.19
368	4769 Taylor	6.0	1	10	30	20.20	146	50	58.0	1	0.17
369	R Urse Majoris Var. 1	7.0	5	10	34	54.01	20	30	25.3	5	0.22
370	... ..	9.5	1	10	35	19.32	137	19	15.0	1	0.09
371	... ..	8.0	1	10	38	44.67	144	50	1.4	1	0.18
372	... ..	9.0	1	10	41	22.73	149	22	52.8	1	0.19
373	53 Leonis ι	6.0	...	10	42	3.21	78	43	51.1	11	0.20
374	... ..	9.0	1	10	42	34.28	141	4	7.1	1	0.18
375	.. ..	8.9	1	10	43	50.46	137	2	29.7	1	0.19
376	... ..	7.8	1	10	46	0.31	141	39	32.0	1	0.29
377	... ..	9.0	1	10	47	50.58	150	5	12.9	1	0.17
378	.. ..	9.0	1	10	47	56.36	129	28	53.1	1	0.21
379	4915 Taylor	7.0	1	10	48	53.80	144	53	22.0	1	0.18
380	... ..	8.0	1	10	50	13.69	144	30	10.9	1	0.20
381	4953 Taylor	7.0	1	10	50	38.19	147	19	17.2	1	0.19
382	4969 Taylor	9.0	1	10	52	16.75	143	35	55.0	1	0.10
383	... ..	8.0	1	10	52	50.29	139	32	28.7	1	0.19
384	59 Leonis ϵ	5.5	...	10	53	39.56	83	9	48.8	2	0.17
385	61 Leonis ρ^1	5.5	...	10	54	50.53	91	44	52.2	2	0.32

357.—1620 Groombridge.

369.—R Urse Majoris Var. 1.—Period 303 days.—Range, 6th to 13th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
351	... ..	+ 2.1250	+ 0.0102	...	+ 17.209	+ 0.152	...	...
352	4476 Taylor ...	+ 2.0798	+ 0.0100	...	+ 17.272	+ 0.147	...	...
353	31 Leonis A ...	+ 3.1974	- 0.0091	- 0.009	+ 17.306	+ 0.225	+ 0.06	3457
354	32 Leonis a ...	+ 3.2206	- 0.0102	- 0.019	+ 17.415	+ 0.225	- 0.01	3459
355	4539 Taylor ...	+ 2.5502	+ 0.0109	...	+ 17.630	+ 0.169	...	...
356	... ..	+ 2.3338	+ 0.0131	...	+ 17.748	+ 0.150	...	...
357	72 R. P. L. ...	+ 10.0084	- 1.6698	- 0.079	+ 17.756	+ 0.677	+ 0.05	3495
358	4577 Taylor ...	+ 2.5781	+ 0.0112	...	+ 17.770	+ 0.166	...	...
359	41 Leonis γ^1 ...	+ 3.2985	- 0.0147	+ 0.019	+ 17.886	+ 0.208	+ 0.15	3523
360	... ..	+ 2.0266	+ 0.0122	...	+ 17.972	+ 0.123	...	...
361	43 Leonis ...	+ 3.1466	- 0.0068	...	+ 18.019	+ 0.194	...	3544
362	... ..	+ 2.5936	+ 0.0121	...	+ 18.031	+ 0.158	...	...
363	44 Leonis ...	+ 3.1682	- 0.0079	...	+ 18.103	+ 0.191	...	3561
364	... ..	+ 2.2200	+ 0.0152	...	+ 18.128	+ 0.131	...	...
365	... ..	+ 2.2199	+ 0.0160	...	+ 18.243	+ 0.126	...	...
366	47 Leonis ρ ...	+ 3.1664	- 0.0079	0.000	+ 18.378	+ 0.176	+ 0.03	3609
367	... ..	+ 2.2406	+ 0.0181	...	+ 18.501	+ 0.119	...	...
368	4769 Taylor ...	+ 2.2915	+ 0.0184	...	+ 18.540	+ 0.120	...	3635
369	R Ura. Maj. Var. 1 ...	+ 4.3691	- 0.1402	...	+ 18.689	+ 0.223	...	...
370	... ..	+ 2.6494	+ 0.0177	...	+ 18.701	+ 0.126	...	...
371	... ..	+ 2.4132	+ 0.0207	...	+ 18.808	+ 0.114	...	...
372	... ..	+ 2.3956	+ 0.0218	...	+ 18.857	+ 0.109	...	...
373	53 Leonis l ...	+ 3.1609	- 0.0080	- 0.003	+ 18.907	+ 0.145	+ 0.02	3708
374	... ..	+ 2.6236	+ 0.0206	...	+ 18.922	+ 0.114	...	...
375	... ..	+ 2.6036	+ 0.0198	...	+ 18.958	+ 0.116	...	...
376	... ..	+ 2.5356	+ 0.0215	...	+ 19.019	+ 0.109	...	...
377	... ..	+ 2.3521	+ 0.0346	...	+ 19.070	+ 0.095	...	...
378	... ..	+ 2.7315	+ 0.0164	...	+ 19.072	+ 0.115	...	...
379	4945 Taylor ...	+ 2.4014	+ 0.0236	...	+ 19.098	+ 0.103	...	...
380	... ..	+ 2.6104	+ 0.0238	...	+ 19.133	+ 0.102	...	...
381	4955 Taylor ...	+ 2.4508	+ 0.0250	...	+ 19.144	+ 0.097	...	...
382	4969 Taylor ...	+ 2.5440	+ 0.0230	...	+ 19.196	+ 0.100	...	...
383	... ..	+ 2.6191	+ 0.0222	...	+ 19.200	+ 0.102	...	...
384	59 Leonis e ...	+ 3.5298	- 0.0056	- 0.005	+ 19.220	+ 0.139	+ 0.06	3760
385	61 Leonis ρ^1 ...	+ 3.0606	- 0.0007	...	+ 19.260	+ 0.117	...	3775

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
386	... ..	9.0	1	10	50	59.40	145	35	22.4	1	0.18
387	4076 Lacaille	8.2	1	10	57	46.14	129	34	13.0	1	0.22
388	63 Leonis χ	5.0	...	10	57	56.90	81	55	29.5	8	0.29
389	... ..	9.5	1	10	58	9.40	140	58	54.6	1	0.18
390	65 Leonis p^3	5.5	...	10	59	55.01	67	18	6.0	1	0.17
391	... ..	9.5	1	11	0	24.00	147	13	24.8	1	0.19
392	5092 Taylor	8.7	1	11	5	16.22	143	48	48.3	1	0.27
393	68 Leonis δ	2.5	...	11	6	49.04	68	43	35.1	11	0.32
394	... ..	8.8	1	11	7	4.51	145	39	55.0	1	0.27
395	... ..	8.4	2	11	8	31.33	150	50	31.6	2	0.21
396	... ..	10.0	1	11	9	26.23	145	54	54.6	1	0.18
397	... ..	9.0	1	11	9	36.60	147	10	54.2	1	0.19
398	74 Leonis ϕ	4.7	...	11	9	41.76	92	54	12.3	4	0.19
399	... ..	10.0	1	11	10	29.26	141	8	15.3	1	0.18
400	... ..	9.0	...	11	11	5.42	127	38	2.2	1	0.21
401	12 Crateris δ	3.3	...	11	12	29.59	104	2	15.0	13	0.33
402	... ..	7.8	1	11	12	45.72	129	31	48.6	1	0.23
403	... ..	8.2	2	11	13	22.11	129	30	37.6	2	0.23
404	... ..	9.5	1	11	21	39.16	128	22	27.3	2	0.29
405	... ..	9.0	1	11	22	45.50	145	53	23.6	1	0.18
406	... ..	9.2	1	11	23	8.90	142	52	15.8	1	0.28
407	87 Leonis ϵ	5.5	...	11	23	18.71	92	14	53.9	3	0.15
408	... ..	9.8	3	11	23	18.84	23	20	52.0	3	0.23
409	... ..	10.0	2	11	26	36.13	23	17	16.5	2	0.23
410	... ..	8.9	1	11	29	46.26	140	15	22.2	1	0.17
411	91 Leonis ν	4.7	...	11	29	56.07	90	4	4.1	13	0.31
412	... ..	8.0	1	11	32	6.37	144	14	11.0	1	0.20
413	... ..	8.4	1	11	33	54.38	127	48	25.5	1	0.24
414	... ..	7.0	1	11	34	17.41	144	20	21.7	1	0.27
415	... ..	7.9	1	11	36	0.31	139	39	56.1	1	0.20
416	5384 Taylor	6.0	1	11	36	59.90	151	43	47.3	1	0.10
417	... ..	9.3	1	11	38	6.44	149	38	28.8	1	0.27
418	... ..	9.2	2	11	38	30.07	129	33	42.1	2	0.26
419	... ..	9.2	1	11	41	5.95	126	30	4.9	1	0.24
420	... ..	5.3	2	11	41	9.29	129	31	44.8	2	0.23

Observed with the Madras Meridian Circle in that Year.

Number.	Star	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
386	..	+ 2.6421	+ 0.0263	..	+ 19.302	+ 0.092	..	..
387	4076 Laticello	+ 2.7767	+ 0.0179	..	+ 19.320	+ 0.100	..	..
388	63 Leonis x	+ 3.1227	- 0.0056	- 0.024	+ 19.325	+ 0.112	+ 0.08	3758
389	..	+ 2.6331	+ 0.0242	..	+ 19.329	+ 0.094	..	..
390	65 Leonis p	+ 3.0884	- 0.0028	..	+ 19.370	+ 0.109	..	3798
391	..	+ 2.5396	+ 0.0282	..	+ 19.384	+ 0.067	..	..
392	5092 Taylor	+ 2.6397	+ 0.0276	..	+ 19.486	+ 0.083	..	..
393	68 Leonis s	+ 3.1917	- 0.0132	+ 0.011	+ 19.518	+ 0.098	+ 0.14	3834
394	..	+ 2.6240	+ 0.0294	..	+ 19.523	+ 0.079	..	..
395	..	+ 2.5383	+ 0.0441	..	+ 19.551	+ 0.074	..	..
396	..	+ 2.6397	+ 0.0304	..	+ 19.569	+ 0.076	..	..
397	..	+ 2.6199	+ 0.0333	..	+ 19.572	+ 0.075	..	..
398	74 Leonis φ	+ 3.0573	+ 0.0006	- 0.009	+ 19.574	+ 0.089	+ 0.04	3849
399	..	+ 2.7164	+ 0.0273	..	+ 19.589	+ 0.077	..	..
400	..	+ 2.8537	+ 0.0186	..	+ 19.601	+ 0.080	..	..
401	12 Crateris s	+ 3.0031	+ 0.0064	- 0.009	+ 19.626	+ 0.081	- 0.18	3859
402	..	+ 2.8463	+ 0.0200	..	+ 19.630	+ 0.077	..	..
403	..	+ 2.8776	+ 0.0209	..	+ 19.741	+ 0.065	..	..
404	..	+ 2.8967	+ 0.0205	..	+ 19.775	+ 0.061	..	..
405	..	+ 2.7527	+ 0.0344	..	+ 19.790	+ 0.066	..	..
406	..	+ 2.7893	+ 0.0318	..	+ 19.797	+ 0.056	..	..
407	87 Leonis c	+ 3.0637	+ 0.0011	- 0.001	+ 19.799	+ 0.062	+ 0.03	3916
408	..	+ 3.5657	- 0.0005	..	+ 19.799	+ 0.074	..	..
409	..	+ 3.5231	- 0.0023	..	+ 19.843	+ 0.065	..	..
410	..	+ 2.7769	+ 0.0406	..	+ 19.881	+ 0.044	..	..
411	91 Leonis v	+ 3.0718	+ 0.0003	- 0.003	+ 19.883	+ 0.049	- 0.03	3946
412	..	+ 2.8467	+ 0.0356	..	+ 19.907	+ 0.041	..	..
413	..	+ 2.9541	+ 0.0219	..	+ 19.925	+ 0.040	..	..
414	..	+ 2.8634	+ 0.0364	..	+ 19.929	+ 0.037	..	..
415	..	+ 2.9074	+ 0.0320	..	+ 19.945	+ 0.035	..	..
416	5384 Taylor	+ 2.8230	+ 0.0470	..	+ 19.954	+ 0.032	..	3976
417	..	+ 2.8543	+ 0.0444	..	+ 19.964	+ 0.030	..	..
418	..	+ 2.9093	+ 0.0237	..	+ 19.968	+ 0.031	..	..
419	..	+ 2.9906	+ 0.0218	..	+ 19.987	+ 0.027	..	..
420	..	+ 2.9814	+ 0.0240	..	+ 19.987	+ 0.027	..	..

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.		
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>				
421	04 Leonis β	...	...	20	11	42	417	74	39	45.0	6	0.35	
422	...	...	...	9.3	1	11	43	522	143	44	54.7	1	0.27
423	5427 Taylor	...	...	6.0	3	11	44	2.03	94	34	18.1	3	0.25
424	...	...	...	8.2	1	11	44	41.15	129	2	19.6	1	0.24
425	5433 Taylor	...	...	7.8	2	11	44	48.41	129	32	40.8	2	0.23
426	...	...	...	9.4	1	11	45	48.58	142	30	41.1	1	0.28
427	...	...	...	8.7	...	11	49	53.93	128	5	8.2	1	0.24
428	...	...	...	8.7	1	11	51	20.73	128	52	13.9	1	0.24
429	...	...	...	9.0	1	11	51	33.69	144	12	35.9	1	0.28
430	...	...	...	9.7	2	11	53	47.12	129	35	29.0	2	0.23
431	...	...	...	9.0	1	11	56	20.43	128	29	37.2	1	0.37
432	5534 Taylor	...	...	8.0	1	11	56	46.47	143	56	59.0	1	0.37
433	4995 Lacaille	...	...	7.3	1	11	56	51.02	142	44	6.0	1	0.29
434	89 R. P. L.	...	...	6.3	...	11	57	48.13	3	39	13.4	10	0.43
435	...	...	...	8.0	1	11	58	58.32	128	27	25.6	1	0.24
436	...	...	...	8.0	1	11	59	41.35	144	15	51.2	1	0.38
437	...	...	...	9.0	1	12	1	33.96	130	1	14.1	1	0.23
438	5041 Lacaille	...	...	8.2	1	12	2	20.66	141	22	52.4	1	0.27
439	...	...	...	9.5	1	12	2	31.21	141	5	17.7	1	0.10
440	2 Corvi	...	...	3.0	...	12	3	4.96	111	51	28.0	5	0.34
441	...	...	...	9.0	1	12	3	35.27	145	56	44.2	1	0.27
442	...	...	...	8.0	1	12	5	44.87	134	7	45.7	1	0.32
443	...	...	...	9.5	1	12	5	59.56	130	10	45.5	1	0.23
444	...	...	...	8.0	1	12	6	9.37	138	27	11.7	1	0.28
445	...	...	...	9.4	1	12	6	26.01	142	50	19.4	1	0.29
446	5613 Taylor	...	...	7.2	1	12	7	52.61	130	22	28.7	1	0.24
447	69 Ura. Maj. δ (Miser)	...	...	4.5	...	12	8	37.92	33	12	22.1	3	0.25
448	...	...	...	8.0	1	12	8	46.96	144	19	53.0	1	0.28
449	15 Virginis η	...	...	3.7	...	12	13	53.82	89	54	19.3	4	0.36
450	...	...	...	9.6	1	12	14	0.35	143	44	28.3	1	0.27
451	5119 Lacaille	...	...	9.0	1	12	15	18.51	138	33	54.9	1	0.18
452	...	...	...	8.5	1	12	15	48.74	141	39	37.5	1	0.27
453	...	...	...	8.9	1	12	16	42.61	147	9	36.1	1	0.27
454	...	...	...	10.0	1	12	18	35.77	143	29	47.8	1	0.29
455	...	...	...	9.3	1	12	18	57.33	179	43	20.9	1	0.23

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
421	94 Leonis β	+ 3.1007	- 0.0074	- 0.036	+ 19.994	+ 0.025	+ 0.10	3996
422	"	+ 2.9376	+ 0.0882	...	+ 20.000	+ 0.022	..	...
423	5427 Taylor	+ 3.0646	+ 0.0034	...	+ 20.007	+ 0.022	...	4006
424	"	+ 2.9997	+ 0.0241	..	+ 20.011	+ 0.020	..	..
425	5433 Taylor	+ 2.9990	+ 0.0246	..	+ 20.011	+ 0.020	..	..
426	"	+ 2.9640	+ 0.0373	...	+ 20.017	+ 0.017	..	...
427	"	+ 3.0259	+ 0.0241	..	+ 20.036	+ 0.010	...	...
428	"	+ 3.0314	+ 0.0249	...	+ 20.041	+ 0.007	...	..
429	"	+ 3.0038	+ 0.0410	...	+ 20.042	+ 0.007	..	..
430	"	+ 3.0420	+ 0.0258	...	+ 20.048	+ 0.008	...	...
431	"	+ 3.0550	+ 0.0253	..	+ 20.053	- 0.002	...	..
432	5534 Taylor	+ 3.0462	+ 0.0421	...	+ 20.053	- 0.003	..	..
433	4995 Lacaille.	+ 3.0479	+ 0.0404	...	+ 20.053	- 0.003	..	...
434	89 R. P. L. ..	+ 3.2726	- 0.5270	...	+ 20.054	- 0.004	..	4070
435	"	+ 3.0673	+ 0.0255	...	+ 20.055	- 0.007	..	..
436	"	+ 3.0695	+ 0.0434	...	+ 20.055	- 0.009	...	...
437	"	+ 3.0798	+ 0.0273	...	+ 20.054	- 0.012	..	..
438	5041 Lacaille	+ 3.0908	+ 0.0400	..	+ 20.054	- 0.014	..	..
439	"	+ 3.0906	+ 0.0396	...	+ 20.054	- 0.015	..	..
440	2 Corvi	+ 3.0792	+ 0.0142	- 0.005	+ 20.054	- 0.016	- 0.01	4097
441	"	+ 3.1030	+ 0.0473	..	+ 20.053	- 0.016	..	..
442	"	+ 3.1045	+ 0.0318	..	+ 20.049	- 0.021	..	..
443	"	+ 3.1016	+ 0.0290	...	+ 20.048	- 0.021	..	..
444	"	+ 3.1126	+ 0.0369	...	+ 20.048	- 0.022	..	..
445	"	+ 3.1216	+ 0.0410	..	+ 20.048	- 0.022	..	..
446	5618 Taylor	+ 3.1111	+ 0.0284	..	+ 20.044	- 0.025	..	..
447	69 Urs. Maj. δ	+ 3.0922	- 0.0445	+ 0.015	+ 20.041	- 0.026	+ 0.04	4123
448	"	+ 3.1434	+ 0.0460	..	+ 20.041	- 0.027	..	...
449	15 Virginis η	+ 3.0719	+ 0.0027	- 0.007	+ 20.023	- 0.035	+ 0.03	4145
450	"	+ 3.1533	+ 0.0464	..	+ 20.018	- 0.038	..	..
451	5119 Lacaille	+ 3.1731	+ 0.0899	..	+ 20.010	- 0.040	..	..
452	"	+ 3.1550	+ 0.0435	...	+ 20.008	- 0.042	..	..
453	"	+ 3.2229	+ 0.0535	..	+ 20.001	- 0.044	..	..
454	"	+ 3.2185	+ 0.0464	..	+ 19.989	- 0.047	..	..
455	"	+ 3.1634	+ 0.0292	...	+ 19.987	- 0.047	..	..

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h	m.	s.	"	'	"		
456	...	7.8	1	12	18	59.97	147	20	59.3	1	0.21
457	...	7.9	1	12	19	13.36	144	3	50.2	1	0.28
458	...	8.5	1	12	19	49.79	124	12	47.8	1	0.32
459	...	7.8	1	12	20	42.62	141	18	58.0	1	0.28
460	5725 Taylor	7.0	1	12	21	6.95	145	38	27.1	1	0.18
461	21 Virginis η	5.5	2	12	26	42.48	98	41	45.2	2	0.27
462	9 Corvi β	2.3	...	12	27	11.69	112	38	19.7	5	0.37
463	...	9.0	1	12	27	46.22	140	55	11.2	1	0.28
464	...	9.0	1	12	30	47.53	142	19	22.4	1	0.28
465	R. Virginis Var. 2	9.1	3	12	31	32.83	52	15	27.4	3	0.33
466	...	9.3	1	12	31	48.80	84	30	11.7	1	0.38
467	26 Virginis χ	5.0	2	12	32	10.64	97	14	27.6	5	0.28
468	...	9.0	1	12	32	46.05	143	7	2.1	1	0.29
469	...	8.9	1	12	33	43.61	145	33	10.0	1	0.27
470	5830 Taylor	7.8	1	12	34	23.55	144	0	34.8	1	0.27
471	29 Virginis γ^1 (north)	3.5	..	12	34	43.09	90	41	49.0	1	0.40
472	S. Ursae Majoris Var. 2	8.5	1	12	37	54.71	28	9	19.6	1	0.38
473	5863 Taylor	7.6	1	12	38	18.48	143	51	43.8	1	0.27
474	...	8.8	1	12	41	36.48	141	49	14.8	1	0.28
475	...	9.0	1	12	42	20.72	147	18	34.6	1	0.27
476	...	8.9	1	12	42	44.02	142	51	35.8	1	0.29
477	...	9.0	1	12	42	47.52	139	24	55.7	1	0.28
478	...	8.9	1	12	43	13.98	129	7	30.6	1	0.29
479	40 Virginis ϕ	5.0	1	12	47	13.02	98	47	38.8	2	0.26
480	99 H. P. L.	5.6	..	12	48	10.08	5	50	33.2	2	0.59
481	...	8.9	1	12	49	20.13	145	33	53.3	1	0.27
482	12 Canum Venaticorum α	3.0	..	12	49	36.76	50	56	28.9	5	0.35
483	5974 Taylor	8.9	1	12	51	50.95	113	38	16.2	1	0.27
484	...	8.4	2	12	53	4.37	142	23	44.0	2	0.28
485	...	8.0	1	12	53	22.37	135	44	7.9	1	0.32
486	...	9.2	1	12	54	34.52	139	18	3.3	1	0.28
487	...	8.3	1	12	56	50.17	123	24	51.4	1	0.32
488	5381 Lacaille	7.8	1	12	57	4.42	129	53	47.9	1	0.31
489	51 Virginis θ	4.7	..	13	2	51.48	91	48	25.0	5	0.37
490	0067 Taylor	6.0	1	13	3	43.62	140	11	25.0	1	0.18

465.—R. Virginis Var. 2.—Period 146 days.—Range, 6.5 to 11th magnitude.

472.—S. Ursae Majoris Var. 2.—Period 225 days.—Range, 7th to 12th magnitude.

480.—1940 Groombridge.

482.—Second star.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
456	.. ..	+ 3.2449	+ 0.0546	...	+ 19.986	- 0.040	...	..
457	.. ..	+ 3.2266	+ 0.0492	..	+ 19.984	- 0.040	..	..
458	.. ..	+ 3.1806	+ 0.0244	...	+ 19.979	- 0.040	..	..
459	...	+ 3.2228	+ 0.0438	...	+ 19.973	- 0.081	...	..
460	5725 Taylor	+ 3.2519	+ 0.0517	...	+ 19.970	- 0.045	..	..
461	21 Virginis q	+ 3.0959	+ 0.0080	- 0.009	+ 19.919	- 0.062	0.00	4230
462	9 Corvi β. ...	+ 3.1379	+ 0.0164	- 0.008	+ 19.915	- 0.064	+ 0.07	4234
463	.. ..	+ 3.2711	+ 0.0447	...	+ 19.908	- 0.067	...	..
464	.. ..	+ 3.3039	+ 0.0476	...	+ 19.874	- 0.074	...	..
465	R Virginis Var. 2	+ 3.0471	- 0.0008	..	+ 19.865	- 0.070	...	..
466	...	+ 3.0541	+ 0.0065	...	+ 19.862	- 0.071	..	..
467	26 Virginis x	+ 3.0958	+ 0.0075	...	+ 19.857	- 0.074	..	4257
468	.. ..	+ 3.3259	+ 0.0496	..	+ 19.850	- 0.079	...	..
469	.. ..	+ 3.3579	+ 0.0548	...	+ 19.838	- 0.081	..	..
470	5830 Taylor ...	+ 3.3472	+ 0.0518	...	+ 19.829	- 0.082	...	4266
471	29 Virginis γ ¹	+ 3.0744	+ 0.0043	- 0.037	+ 19.826	- 0.078	+ 0.05	4268
472	S Ura. Maj. Var. 2	+ 2.9607	- 0.0360	...	+ 19.781	- 0.073	...	..
473	5403 Taylor	+ 3.3767	+ 0.0521	..	+ 19.776	- 0.091	...	4283
474	.. ..	+ 3.3790	+ 0.0490	...	+ 19.726	- 0.067	..	..
475	.. ..	+ 3.4548	+ 0.0613	...	+ 19.714	- 0.101	..	..
476	.. ..	+ 3.3998	+ 0.0512	..	+ 19.707	- 0.100	...	..
477	.. ..	+ 3.3618	+ 0.0449	..	+ 19.706	- 0.099	...	..
478	.. ..	+ 3.2760	+ 0.0313	..	+ 19.700	- 0.098	..	..
479	40 Virginis φ	+ 3.1144	+ 0.0092	- 0.002	+ 19.681	- 0.101	+ 0.04	4330
480	99 R. P. L.	+ 0.3463	+ 0.2369	- 0.017	+ 19.614	- 0.019	- 0.04	4339
481	.. ..	+ 3.4886	+ 0.0586	..	+ 19.598	- 0.117	...	..
482	12 Can. Ven. a	+ 2.8389	- 0.0152	- 0.023	+ 19.587	- 0.090	- 0.06	4346
483	5974 Taylor	+ 3.4794	+ 0.0546	..	+ 19.544	- 0.122	..	..
484	.. ..	+ 3.4704	+ 0.0522	..	+ 19.519	- 0.109	..	..
485	...	+ 3.3887	+ 0.0407	..	+ 19.514	- 0.123	..	..
486	.. ..	+ 3.4387	+ 0.0465	..	+ 19.489	- 0.127	..	..
487	.. ..	+ 3.2889	+ 0.0368	..	+ 19.440	- 0.126	..	..
488	5384 Lacaille	+ 3.3481	+ 0.0335	..	+ 19.437	- 0.128	..	..
489	51 Virginis θ	+ 3.1025	+ 0.0078	- 0.004	+ 19.303	- 0.133	+ 0.04	4401
490	6067 Taylor	+ 3.6875	+ 0.0719	..	+ 19.285	- 0.156	..	4412

480—Proper Motions adopted from "Hodgkin's Polar List for 1855"

Mean Positions of Stars for 1963 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
491	.. .. .	9.2	1	13	4	28.48	138	10	13.4	1	0.29
492	.. .. .	9.5	1	13	4	32.00	143	12	0.9	1	0.27
493	.. .. .	8.9	1	13	5	33.90	124	16	11.8	1	0.32
494	W. Virginis Var. 1	8.8	1	13	6	51.05	105	49	35.1	2	0.39
495	.. .. .	9.0	1	13	7	35.75	139	45	53.0	1	0.28
496	.. .. .	8.7	1	13	9	42.08	129	55	57.0	1	0.31
497	59 Virginis	6.5	...	13	10	16.63	99	49	23.6	2	0.40
498	6129 Taylor	7.4	1	13	12	9.65	130	28	12.3	1	0.37
499	.. .. .	7.9	1	13	12	49.63	122	56	14.5	1	0.33
500	5503 Lacaille	8.0	1	13	14	5.50	125	23	32.1	1	0.38
501	.. .. .	9.0	1	13	15	43.91	145	12	31.9	1	0.27
502	67 Virginis ϵ (Spica)	1.0	...	13	17	58.68	100	26	42.5	9	0.36
503	12872 O. A. S.	10.2	1	13	19	17.48	116	56	5.0	1	0.34
504	5546 Lacaille	9.0	1	13	19	37.46	143	27	9.0	1	0.28
505	103 R. P. L.	7.3	..	13	20	18.58	4	31	44.6	1	0.23
506	R. Hydrae Var. 1	6.8	3	13	22	13.91	112	34	19.6	4	0.31
507	76 Virginis λ	5.0	1	13	25	45.31	100	27	29.7	3	0.26
508	S. Virginis Var. 6	7.4	4	13	25	50.89	95	29	22.2	4	0.30
509	79 Virginis 3	4.0	...	13	27	42.82	89	53	39.8	12	0.39
510	.. .. .	7.8	1	13	32	54.55	129	1	15.1	1	0.29
511	6363 Taylor	8.0	1	13	36	34.53	147	33	9.7	1	0.29
512	.. .. .	9.0	1	13	37	27.78	124	39	58.8	1	0.40
513	.. .. .	8.8	1	13	38	10.39	122	46	44.4	1	0.33
514	.. .. .	9.3	1	13	40	26.82	139	23	43.2	1	0.38
515	25463 Lalande	9.3	3	13	42	15.16	64	57	26.5	3	0.32
516	80 Virginis	5.7	...	13	42	25.86	107	27	0.7	2	0.41
517	.. .. .	8.3	1	13	43	10.81	123	6	14.3	1	0.35
518	.. .. .	9.0	1	13	44	11.61	127	56	26.1	1	0.38
519	.. .. .	9.7	1	13	45	19.85	128	22	47.0	1	0.40
520	.. .. .	8.3	2	13	45	38.93	122	54	14.1	2	0.33
521	8 Bootis η	3.0	...	13	48	9.62	70	54	51.9	9	0.40
522	.. .. .	8.0	1	13	50	37.00	123	43	37.3	1	0.35
523	25759 Lalande	7.6	4	13	54	39.24	67	21	29.6	5	0.36
524	93 Virginis γ	4.6	..	13	54	40.51	87	47	27.2	3	0.41
525	25496 Lalande	7.5	4	13	59	51.48	67	10	35.8	4	0.33

494. — W. Virginis Var. 1. — Changes irregularly from 7th to 10.5 magnitude.

506. — 2077 Groombridge.

506. — R. Hydrae Var. 1. — Period about 15 months. — Range, 4th to 10th magnitude.

508. — S. Virginis Var. 6. — Period 374 days. — Range, 6th to 12.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
491	... ..	+ 3.4868	+ 0.0459	...	+ 19.267	- 0.150	...	..
492	... ..	+ 3.5687	+ 0.0562	...	+ 19.266	- 0.153	...	...
493	... ..	+ 3.3292	+ 0.0282	...	+ 19.240	- 0.145	...	...
494	W Virginia Var. 1	+ 3.1810	+ 0.0142	...	+ 19.208	- 0.142	...	...
495	... ..	+ 3.5314	+ 0.0493	...	+ 19.189	- 0.158	...	...
496	... ..	+ 3.4072	+ 0.0346	...	+ 19.135	- 0.157	...	..
497	58 Virginia ..	+ 3.1420	+ 0.0109	...	+ 19.120	- 0.147	...	4442
498	6129 Taylor ...	+ 3.4253	+ 0.0353	...	+ 19.069	- 0.163	...	...
499	... ..	+ 3.3427	+ 0.0273	...	+ 19.051	- 0.161	...	...
500	5503 Lacaille	+ 3.3739	+ 0.0298	..	+ 19.016	- 0.164	...	...
501	... ..	+ 3.6965	+ 0.0629	...	+ 18.970	- 0.183	...	...
502	67 Virginia A	+ 3.1544	+ 0.0100	- 0.005	+ 18.906	- 0.163	+ 0.04	4480
503	12872 O. A. S.	+ 3.3024	+ 0.0224	...	+ 18.867	- 0.172	...	...
504	5546 Lacaille	+ 3.6862	+ 0.0589	...	+ 18.857	- 0.192	..	...
505	103 R. P. L.	- 2.7201	+ 0.9899	...	+ 18.836	+ 0.128	...	4493
506	R Hydræ Var. 1	+ 3.2672	+ 0.0192	...	+ 18.779	- 0.176	..	4501
507	76 Virginia A	+ 3.1535	+ 0.0113	...	+ 18.668	- 0.176	...	4521
508	S Virginia Var. 6	+ 3.1277	+ 0.0096	...	+ 18.664	- 0.175	...	...
509	79 Virginia 3	+ 3.0710	+ 0.0064	- 0.019	+ 18.606	- 0.176	- 0.06	4532
510	... ..	+ 3.4994	+ 0.0349	...	+ 18.429	- 0.210	.	...
511	6363 Taylor	+ 3.9322	+ 0.0733	...	+ 18.300	- 0.243	...	...
512	... ..	+ 3.5135	+ 0.0346	...	+ 18.270	- 0.220	...	...
513	... ..	+ 3.4297	+ 0.0283	...	+ 18.242	- 0.216	...	...
514	... ..	+ 3.5850	+ 0.0356	...	+ 18.160	- 0.228	...	...
515	25463 Lalande	+ 2.8026	- 0.0032	...	+ 18.092	- 0.184	...	..
516	89 Virginia ..	+ 3.2537	+ 0.0164	- 0.009	+ 18.085	- 0.213	+ 0.03	4608
517	... ..	+ 3.4514	+ 0.0287	..	+ 18.057	- 0.227	..	...
518	... ..	+ 3.5297	+ 0.0341	..	+ 18.018	- 0.235	..	...
519	... ..	+ 3.5418	+ 0.0346	...	+ 17.974	- 0.238	...	...
520	... ..	+ 3.4568	+ 0.0286	..	+ 17.962	- 0.238	.	...
521	S Bootis γ	+ 2.8617	- 0.0006	- 0.004	+ 17.863	- 0.199	+ 0.36	4648
522	... ..	+ 3.4863	+ 0.0295	...	+ 17.764	- 0.244	...	...
523	25759 Lalande	+ 2.9047	- 0.0016	..	+ 17.597	- 0.204	...	...
524	99 Virginia γ	+ 3.0474	+ 0.0064	+ 0.001	+ 17.506	- 0.221	+ 0.07	4672
525	25896 Lalande	+ 2.7911	- 0.0023	...	+ 17.374	- 0.210	..	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
526	6585 Taylor ...	7.8	1	14	1	18.94	124	13	40.7	1	0.35
527	... ..	9.0	...	14	2	22.39	129	3	58.4	1	0.41
528	108 R. P. L. ...	7.3	...	14	4	4.24	3	35	11.3	2	0.62
529	U Bootis Var. 4 ...	9.7	1	14	4	18.65	79	32	14.1	1	0.40
530	6616 Taylor ...	5.7	...	14	5	26.28	146	26	31.9	1	0.38
531	... ..	8.0	1	14	6	5.20	135	1	0.6	1	0.36
532	16 Bootis α (Arcturus) ...	1.0	...	14	9	24.78	70	6	11.5	5	0.43
533	100 Virginis A ..	5.0	...	14	11	41.84	102	44	19.0	3	0.38
534	... ..	9.3	1	14	12	26.80	136	49	32.4	1	0.35
535	... ..	8.9	1	14	14	30.90	122	35	29.6	1	0.33
536	... ..	8.7	...	14	15	15.09	122	11	18.7	1	0.35
537	6709 Taylor ...	7.0	1	14	15	55.15	119	3	2.1	1	0.35
538	... ..	9.9	1	14	17	21.04	123	13	6.2	1	0.33
539	6740 Taylor ...	7.6	1	14	19	1.39	133	42	38.0	1	0.32
540	... ..	8.7	1	14	21	53.94	122	33	43.7	1	0.33
541	5962 Lacaille ...	8.0	1	14	22	39.49	120	46	28.6	1	0.38
542	... ..	8.0	1	14	23	38.57	136	54	8.5	1	0.35
543	... ..	8.0	1	14	24	9.13	123	48	17.8	1	0.34
544	25 Bootis ρ ...	4.0	...	14	25	55.47	59	1	33.5	6	0.42
545	... ..	9.5	1	14	26	40.04	123	19	45.2	1	0.33
546	... ..	7.8	1	14	29	23.02	124	55	13.4	1	0.37
547	6027 Lacaille ...	7.7	1	14	31	0.63	122	47	2.2	1	0.33
548	R Bootis Var. 1 ..	8.2	2	14	31	9.02	62	40	3.1	3	0.38
549	... ..	7.6	1	14	32	36.73	121	44	2.6	1	0.35
550	6848 Taylor ...	7.7	1	14	32	44.22	136	41	2.4	1	0.35
551	5 Libra ...	6.3	...	14	34	24.82	104	52	48.4	1	0.36
552	36 Bootis ϵ ...	2.3	...	14	39	0.13	62	20	48.1	5	0.43
553	... ..	7.7	1	14	39	16.66	124	9	30.8	1	0.37
554	27022 Lalande ...	7.5	3	14	43	10.43	78	56	9.6	4	0.35
555	9 Libra α^3 ...	2.5	...	14	43	18.15	105	28	12.9	4	0.39
556	27123 Lalande ..	8.2	3	14	47	20.01	109	27	7.9	4	0.36
557	... ..	8.9	1	14	51	31.68	123	13	29.6	1	0.37
558	... ..	8.3	1	14	57	28.39	131	30	27.2	1	0.36
559	43 Bootis δ ...	5.0	...	14	58	34.52	62	30	5.2	5	0.47
560	7079 Taylor ...	6.7	...	15	3	16.26	128	7	1.1	1	0.35

528.—2000 Groombridge.

529.—U Bootis Var. 4.—Period uncertain.—Range, 8.7 to 12th magnitude.

548.—R Bootis Var. 1.—Period 223 days.—Range, 0th to 12th magnitude.

554.—Comparison star for Iris in 1861.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
526	6585 Taylor ...	+ 3.5314	+ 0.0302	...	+ 17.310	- 0.268	...	...
527	" ...	+ 3.6245	+ 0.0357	...	+ 17.263	- 0.276	...	...
528	108 R. P. L. ...	- 7.9195	+ 2.5204	...	+ 17.187	+ 0.588	...	...
529	U Bootis Var. 1 ...	+ 2.9446	+ 0.0035	...	+ 17.177	- 0.229	...	...
530	6616 Taylor ...	+ 4.1210	+ 0.0686	...	+ 17.125	- 0.320	...	4709
531	" ...	+ 3.7715	+ 0.0445	...	+ 17.096	- 0.295	...	...
532	16 Bootis A ...	+ 2.8132	+ 0.0004	- 0.079	+ 16.943	- 0.227	+ 1.93	4729
533	100 Virginia A ...	+ 3.2363	+ 0.0140	- 0.002	+ 16.834	- 0.264	- 0.02	4743
534	" ...	+ 3.8506	+ 0.0477	...	+ 16.798	- 0.314	...	...
535	" ...	+ 3.5455	+ 0.0284	...	+ 16.699	- 0.293	...	...
536	" ...	+ 3.5405	+ 0.0281	...	+ 16.662	- 0.294	...	...
537	6709 Taylor ...	+ 3.4872	+ 0.0252	...	+ 16.630	- 0.292	...	...
538	" ...	+ 3.5659	+ 0.0292	...	+ 16.560	- 0.301	...	...
539	6740 Taylor ...	+ 3.8007	+ 0.0423	...	+ 16.477	- 0.323	...	...
540	" ...	+ 3.5675	+ 0.0285	...	+ 16.332	- 0.300	...	...
541	5962 Lacaille ...	+ 3.7209	+ 0.0365	...	+ 16.295	- 0.324	...	...
542	" ...	+ 3.9102	+ 0.0476	...	+ 16.243	- 0.342	...	...
543	" ...	+ 3.5987	+ 0.0297	...	+ 16.217	- 0.316	...	...
544	25 Bootis p ...	+ 2.5948	- 0.0015	- 0.008	+ 16.126	- 0.233	- 0.14	4808
545	" ...	+ 3.5970	+ 0.0291	...	+ 16.087	- 0.321	...	...
546	" ...	+ 3.6333	+ 0.0306	...	+ 15.944	- 0.320	...	...
547	6027 Lacaille ...	+ 3.5992	+ 0.0294	...	+ 15.867	- 0.320	...	...
548	R Bootis Var. 1 ...	+ 2.6496	- 0.0004	...	+ 15.849	- 0.244	...	...
549	" ...	+ 3.5830	+ 0.0274	...	+ 15.769	- 0.330	...	...
550	6848 Taylor ...	+ 3.9487	+ 0.0469	...	+ 17.764	- 0.364	...	...
551	5 Libra ...	+ 3.3956	+ 0.0152	- 0.003	+ 15.452	- 0.314	+ 0.01	4808
552	35 Bootis e ...	+ 2.6240	- 0.0001	- 0.005	+ 15.419	- 0.252	- 0.01	4876
553	" ...	+ 3.6229	+ 0.0294	...	+ 15.403	- 0.349	...	...
554	27022 Lalande ...	+ 2.9012	+ 0.0045	...	+ 15.183	- 0.283	...	...
555	9 Libra a ...	+ 3.3139	+ 0.0154	- 0.007	+ 15.176	- 0.324	+ 0.06	4895
556	27123 Lalande ...	+ 3.3870	+ 0.0178	...	+ 14.943	- 0.335	...	...
557	" ...	+ 3.0677	+ 0.0289	...	+ 14.696	- 0.370	...	...
558	" ...	+ 3.0900	+ 0.0371	...	+ 14.326	- 0.406	...	...
559	43 Bootis f ...	+ 2.5833	+ 0.0010	- 0.013	+ 14.265	- 0.232	0.00	4900
560	7079 Taylor ...	+ 3.6975	+ 0.0273	...	+ 13.978	- 0.363	...	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
561	... ..	8.6	1	15	3	30.06	122	18	27.9	1	0.37
562	24 Libræ ϵ^1	5.6	1	15	4	25.06	109	16	14.5	2	0.37
563	111 R. P. L.	7.0	..	15	5	51.25	5	31	8.6	2	0.65
564	... ..	8.9	1	15	6	39.40	130	26	16.4	1	0.40
565	27 Libræ β	2.0	...	15	9	38.30	98	52	30.1	6	0.45
566	... ..	9.2	1	15	11	47.26	130	23	46.9	1	0.39
567	... ..	9.2	1	15	14	8.23	128	7	17.9	1	0.37
568	S Serpentis Var. 3	10.3	1	15	15	14.94	75	11	28.9	1	0.40
569	... ..	9.0	1	15	20	19.71	130	8	21.5	1	0.39
570	32 Libræ γ^1	4.0	...	15	20	32.08	106	14	10.2	2	0.38
571	... ..	9.0	1	15	21	37.08	129	25	47.1	1	0.40
572	7220 Taylor	7.9	1	15	22	2.85	123	6	20.8	1	0.42
573	114 R. P. L.	7.0	...	15	22	52.68	9	14	49.8	1	0.95
574	7240 Taylor	7.8	1	15	24	20.21	130	1	16.1	1	0.38
575	... ..	7.9	1	15	24	56.73	122	43	24.4	1	0.37
576	5 Cor. Bor. α (Alpha)	2.0	...	15	28	53.23	62	40	20.2	3	0.47
577	... ..	8.8	1	15	28	55.03	119	38	51.0	1	0.38
578	... ..	9.3	1	15	30	6.00	129	33	14.7	1	0.40
579	43 Libræ α	5.0	1	15	34	3.55	100	13	54.7	1	0.34
580	... ..	8.3	1	15	34	46.79	129	1	16.1	1	0.38
581	XV. 704 W. B. E.	8.4	3	15	37	12.43	92	34	38.5	3	0.37
582	24 Serpentis α	2.3	...	15	37	31.25	83	8	27.2	6	0.48
583	28787 Lalande	8.4	2	15	42	2.89	99	46	43.2	3	0.11
584	R Coronæ Borealis Var 1.	7.4	2	15	42	55.81	61	25	16.9	2	0.41
585	R. Serpentis Var 2	0.4	1	15	44	22.70	74	26	27.0	1	0.37
586	46 Libræ θ	4.7	...	15	46	1.66	106	19	27.5	1	0.49
587	... ..	7.0	1	15	50	59.46	143	45	3.8	1	0.41
588	7 Scorpii δ	3.5	...	15	52	14.19	112	13	43.4	1	0.49
589	7439 Taylor	8.5	1	15	54	22.01	126	44	53.8	1	0.38
590	8 Scorpii β^1	2.0	...	15	57	28.62	100	25	38.6	6	0.44
591	29391 Lalande	7.0	2	16	1	45.44	102	41	19.4	4	0.43
592	116 R. P. L.	7.0	...	16	4	55.39	4	18	35.9	3	0.78
593	XVI. 83 W. B. E.	8.0	...	16	5	59.73	102	40	55.2	1	0.41
594	1 Ophiuchi δ	3.0	...	16	7	10.31	98	20	30.9	1	0.54
595	29610 Lalande	8.0	...	16	8	6.82	105	22	24.2	1	0.41

561.—Double:—the second star observed.

563.—2313 Groombridge.

568.—S Serpentis Var 3.—Period 361 days.—Range, 5th to 12.5 magnitude.

573.—2283 Groombridge.

583.—591.—595.—Comparison stars for Donati's Comet of 1858.

584.—R Coronæ Borealis Var 1.—Period 323 days.—Range, 6th to 13th magnitude.

585.—R Serpentis Var. 2.—Period 658 days.—Range, 6th to 11th magnitude.

592.—2423 Carrington.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
561	... ..	+ 3.6789	+ 0.0264	...	+ 13.963	- 0.392	...	...
562	24 Librae α^1 ...	+ 3.4089	+ 0.0171	- 0.002	+ 13.906	- 0.364	+ 0.04	4695
563	111 R. P. L. ...	- 0.9589	+ 1.1901	...	+ 13.814	+ 0.730	...	5022
564	... ..	+ 3.9008	+ 0.0349	...	+ 13.763	- 0.420	...	...
565	27 Librae β ...	+ 3.2257	+ 0.0117	- 0.009	+ 13.672	- 0.353	+ 0.01	5034
566	.. ..	+ 3.0169	+ 0.0343	...	+ 13.433	- 0.431	...	...
567	.. ..	+ 3.7257	+ 0.0264	...	+ 13.290	- 0.414	..	..
568	S Serpentis Var. 3 ..	+ 2.8060	+ 0.0042	...	+ 13.206	- 0.314	..	...
569	... ..	+ 3.9367	+ 0.0332	...	+ 12.869	- 0.447	...	...
570	32 Librae γ^1 ...	+ 3.3709	+ 0.0148	+ 0.002	+ 12.856	- 0.384	+ 0.05	5050
571	... ..	+ 3.0192	+ 0.0322	...	+ 12.782	- 0.445	...	...
572	7220 Taylor ..	+ 3.7448	+ 0.0258	..	+ 12.754	- 0.427	..	..
573	114 R. P. L. ..	- 23.3003	+ 7.8117	...	+ 12.697	+ 2.626	..	5140
574	7240 Taylor ...	+ 3.9456	+ 0.0325	...	+ 12.698	- 0.453	...	...
575	.. ..	+ 3.7419	+ 0.0252	...	+ 12.667	- 0.431	...	...
576	5 Coronae Borealis α ..	+ 2.6294	+ 0.0023	+ 0.009	+ 12.286	- 0.297	+ 0.07	5143
577	.. ..	+ 3.6736	+ 0.0224	...	+ 12.284	- 0.429	...	..
578	.. ..	+ 3.9484	+ 0.0314	...	+ 12.202	- 0.463	...	..
579	43 Librae α ..	+ 3.4471	+ 0.0157	- 0.003	+ 11.925	- 0.409	+ 0.12	5170
580	... ..	+ 3.9452	+ 0.0302	...	+ 11.874	- 0.471	..	..
581	XV. 704 W. B. E. ..	+ 3.1211	+ 0.0089	..	+ 11.703	- 0.376	...	..
582	24 Serpentis α ..	+ 2.9413	+ 0.0062	+ 0.009	+ 11.680	- 0.354	- 0.05	5196
583	26757 Lalande ...	+ 3.1262	+ 0.0088	...	+ 11.356	- 0.361	...	..
584	R Cor. Bor. Var. 1 ..	+ 2.4702	+ 0.0026	...	+ 11.292	- 0.308	...	5236
585	R Serpentis Var. 2 ..	+ 2.7631	+ 0.0043	...	+ 11.187	- 0.340	..	..
586	46 Librae θ ..	+ 3.3957	+ 0.0136	+ 0.009	+ 11.067	- 0.418	- 0.12	5267
587	.. ..	+ 4.6143	+ 0.0506	...	+ 10.702	- 0.575	...	..
588	7 Scorpii δ ..	+ 3.5358	+ 0.0159	- 0.001	+ 10.610	- 0.443	+ 0.01	5308
589	7439 Taylor ...	+ 3.0226	+ 0.0761	...	+ 10.450	- 0.493	..	..
590	8 Scorpii β^1 ...	+ 3.4777	+ 0.0142	- 0.002	+ 10.219	- 0.441	+ 0.02	5320
591	29391 Lalande ..	+ 3.3339	+ 0.0113	..	+ 9.894	- 0.427	..	..
592	116 R. P. L. ..	- 12.4775	+ 1.7542	..	+ 9.652	+ 1.691	...	..
593	XVI. 83 W. B. E. ..	+ 3.3365	+ 0.0111	..	+ 9.570	- 0.431	..	..
594	1 Ophiuchi δ ..	+ 3.1407	+ 0.0081	- 0.006	+ 9.480	- 0.408	+ 0.13	5414
595	29610 Lalande ..	+ 3.4005	+ 0.0110	...	+ 9.406	- 0.442	...	..

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
596	R Scorpii Var. 1 ...	10.5	4	16	9	29.32	112	36	12.5	4	0.34
597	" " " " " "	10.0	1	16	9	39.76	112	33	22.5	1	0.54
598	20 Scorpii σ ...	3.3	"	16	12	52.00	115	15	37.0	1	0.41
599	15552 O. A. S. ...	9.0	1	16	13	10.71	107	21	51.8	1	0.41
600	" " " " " "	7.5	1	16	14	7.95	146	10	55.2	1	0.42
601	U Scorpii Var. 4 ...	9.0	"	16	14	37.24	107	33	6.6	2	0.39
602	" " " " " "	9.5	1	16	15	42.36	128	7	31.7	1	0.35
603	15607 O. A. S. .	9.0	2	16	16	48.43	107	14	20.3	3	0.49
604	" " " " " "	9.2	1	16	17	55.39	129	30	26.5	1	0.40
605	21 Scorpii α (Antares) ...	1.3	"	16	21	0.70	116	7	27.8	7	0.39
606	23 Scorpii τ ..	3.3	"	16	27	21.53	117	55	42.0	2	0.34
607	5784 Brisbane ...	9.5	1	16	30	49.55	150	39	19.7	1	0.55
608	" " " " " "	7.8	1	16	34	32.73	134	6	54.5	1	0.42
609	40 Hercules 3 ...	2.7	"	16	36	7.31	58	8	50.7	5	0.51
610	15952 O. A. S. ..	9.2	1	16	39	18.72	111	55	24.7	1	0.38
611	S Hercules Var. 3 ...	7.9	3	16	45	39.68	74	49	31.9	3	0.40
612	" " " " " "	8.0	1	16	48	40.65	125	31	11.1	1	0.34
613	27 Ophiuchi κ ...	3.5	"	16	51	11.00	80	24	34.0	8	0.52
614	" " " " " "	8.2	1	16	52	1.15	122	48	45.1	1	0.42
615	16233 O. A. S. ...	8.0	1	16	53	55.13	110	23	27.8	1	0.57
616	16288 O. A. S. ..	7.5	1	16	56	24.05	119	50	1.1	1	0.41
617	7926 Taylor ..	8.0	1	16	59	41.77	136	50	57.9	1	0.52
618	64 Hercules ϵ Var. 1 .	3.5	"	17	8	24.07	75	27	4.2	9	0.50
619	" " " " " "	8.0	1	17	8	56.66	124	4	10.4	1	0.43
620	42 Ophiuchi θ ...	3.5	"	17	13	35.85	114	51	32.7	9	0.52
621	44 Ophiuchi b ...	5.0	1	17	18	0.33	114	2	44.1	2	0.42
622	45 Ophiuchi d ...	5.0	"	17	18	36.50	119	44	21.7	1	0.34
623	4 Arm ...	4.0	"	17	18	44.27	150	33	53.2	1	0.57
624	" " " " " "	8.8	2	17	28	21.22	125	14	35.7	2	0.67
625	55 Ophiuchi ϵ ..	2.0	"	17	28	34.50	77	20	16.4	5	0.40
626	" " " " " "	10.2	1	17	34	30.41	126	15	2.1	1	0.64
627	58 Ophiuchi ...	5.0	"	17	35	13.22	111	34	40.7	3	0.49
628	" " " " " "	8.5	1	17	39	29.41	127	21	33.1	1	0.61
629	" " " " " "	8.0	1	17	39	51.70	126	28	18.6	1	0.42
630	" " " " " "	7.7	1	17	43	16.46	128	36	10.7	1	0.49

601.—R Scorpii Var. 1.—Period 223 days.—Range, 9th magnitude to invisibility.

601.—U Scorpii Var. 4.—A new temporary star, about 9th magnitude when brightest.

603.—Comparison star for U Scorpii Var. 4 on its discovery.

611.—S Hercules Var. 3.—Period 208 days.—Range, 6th to 12th magnitude.

618.— ϵ Hercules Var. 1.—Supposed to change irregularly from 3rd to 4th magnitude.

624.—625.—628.—630.—Comparison stars for Donati's Comet of 1858.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion	
		s	s	s	"	"	"	
596	R Scorpii Var. 1 ..	+ 3.5652	+ 0.0147	...	+ 9.300	- 0.465	...	...
597	... ..	+ 3.5643	+ 0.0147	...	+ 9.286	- 0.465	...	...
598	20 Scorpii σ ..	+ 3.3663	+ 0.0156	- 0.003	+ 9.038	- 0.478	- 0.01	5447
599	15552 O. A. S. ..	+ 3.4456	+ 0.0121	...	+ 9.013	- 0.453	...	...
600	... ..	+ 4.8588	+ 0.0492	...	+ 8.938	- 0.638	...	...
601	U Scorpii Var. 4 ..	+ 3.4511	+ 0.0121	...	+ 8.900	- 0.453	...	...
602	... ..	+ 4.0146	+ 0.0233	...	+ 8.815	- 0.530	...	...
603	15607 O. A. S. ..	+ 3.4455	+ 0.0118	...	+ 8.728	- 0.457	...	...
604	... ..	+ 4.0670	+ 0.0240	...	+ 8.640	- 0.540	...	...
605	21 Scorpii α ..	+ 3.6675	+ 0.0150	- 0.001	+ 8.396	- 0.491	+ 0.03	5408
606	23 Scorpii τ ..	+ 3.7237	+ 0.0152	- 0.001	+ 7.888	- 0.452	+ 0.02	5539
607	5784 Briabane ...	+ 5.2725	+ 0.0545	...	+ 7.608	- 0.715	...	5554
608	... ..	+ 4.2794	+ 0.0247	...	+ 7.306	- 0.584	...	...
609	40 Hercules 5 ..	+ 2.2963	+ 0.0033	- 0.034	+ 7.178	- 0.316	- 0.45	5604
610	15952 O. A. S. ...	+ 3.5772	+ 0.0114	...	+ 6.916	- 0.493	...	...
611	S Hercules Var. 3 ...	+ 2.7283	+ 0.0039	...	+ 6.392	- 0.380	...	...
612	... ..	+ 3.9808	+ 0.0156	...	+ 6.129	- 0.556	...	...
613	27 Ophiuchi α ..	+ 2.8562	+ 0.0043	- 0.023	+ 5.932	- 0.401	- 0.02	5708
614	... ..	+ 3.8965	+ 0.0137	...	+ 5.862	- 0.647	...	...
615	16233 O. A. S. ...	+ 3.5485	+ 0.0093	...	+ 5.703	- 0.498	...	...
616	16288 O. A. S. ..	+ 3.8095	+ 0.0110	...	+ 5.494	- 0.537	...	...
617	7926 Taylor ...	+ 4.4492	+ 0.0203	...	+ 5.217	- 0.629	...	...
618	64 Hercules α Var 1..	+ 2.7339	+ 0.0035	- 0.003	+ 4.477	- 0.391	- 0.04	5821
619	... ..	+ 3.9638	+ 0.0113	...	+ 4.431	- 0.565	...	...
620	42 Ophiuchi θ ...	+ 3.6757	+ 0.0060	- 0.003	+ 4.033	- 0.528	- 0.02	5851
621	44 Ophiuchi b ..	+ 3.6586	+ 0.0073	- 0.002	+ 3.654	- 0.527	+ 0.12	5876
622	45 Ophiuchi d ..	+ 3.8235	+ 0.0084	- 0.002	+ 3.602	- 0.551	+ 0.18	5881
623	3 Arm ...	+ 5.4032	+ 0.0263	- 0.009	+ 3.591	- 0.777	+ 0.09	5877
624	... ..	+ 4.0076	+ 0.0079	...	+ 2.761	- 0.580	...	...
625	55 Ophiuchi α ..	+ 2.7744	+ 0.0030	+ 0.004	+ 2.741	- 0.402	+ 0.20	5941
626	... ..	+ 4.0464	+ 0.0069	...	+ 2.227	- 0.587	...	...
627	58 Ophiuchi ...	+ 3.5987	+ 0.0050	- 0.010	+ 2.164	- 0.523	- 0.04	5957
628	... ..	+ 4.0887	+ 0.0060	...	+ 1.792	- 0.595	...	...
629	... ..	+ 4.0506	+ 0.0057	...	+ 1.760	- 0.591	...	...
630	... ..	+ 4.1367	+ 0.0052	...	+ 1.462	- 0.603	...	...

613-623.—Proper Motions adopted from "Stone's Catalogue."

622.—Proper Motion in Right Ascension taken from "Greenwich Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
631	... ..	9.0	1	17	44	58.68	128	47	40.0	1	0.55
632	7504 Lacaille	7.0	1	17	48	28.07	129	6	46.9	1	0.44
633	... ..	8.7	1	17	50	20.87	130	50	17.6	1	0.40
634	4 Sagittarii <i>b</i>	5.0	1	17	51	25.62	113	47	59.7	2	0.49
635	γ^1 Sagittarii Var. 6	5.5	...	17	56	16.20	119	34	56.7	1	0.42
636	... ..	9.0	2	18	2	45.18	131	44	29.4	2	0.56
637	... ..	10.5	1	18	4	45.03	120	43	36.2	1	0.65
638	13 Sagittarii μ^1	4.5	...	18	5	34.17	111	5	28.3	0	0.53
639	... ..	8.0	1	18	6	1.14	122	25	10.8	1	0.44
640	23 Ursa Minoris δ	4.5	...	18	16	32.44	3	23	47.7	0	0.08
641	22 Sagittarii λ	4.0	...	18	19	30.91	115	29	36.7	1	0.42
642	δ^1 Telescopii	5.0	...	18	21	53.73	135	50	49.0	1	0.64
643	... ..	8.9	1	18	28	12.72	135	84	34.5	1	0.64
644	3 Lyræ α (Vega)	1.0	...	18	32	17.94	51	20	31.7	6	0.58
645	... ..	8.9	4	18	35	44.46	137	11	4.0	4	0.61
646	7872 Lacaille	6.3	1	18	42	15.77	136	45	6.9	1	0.65
647	7878 Lacaille	6.5	1	18	42	45.83	136	44	43.0	1	0.60
648	10 Lyræ β Var. 1...	4.0	...	18	45	1.25	56	47	40.6	4	0.59
649	... ..	8.0	1	18	46	49.55	137	44	59.3	1	0.70
650	13 Lyræ Var. 2	4.3	...	18	51	9.74	46	13	59.4	1	0.58
651	... ..	9.3	...	18	51	55.50	140	55	55.2	1	0.64
652	39 Sagittarii ϕ	4.7	...	18	56	28.24	111	56	18.6	2	0.49
653	17 Aquilæ 3	3.3	...	18	59	6.69	76	20	16.0	7	0.62
654	131 R. P. L.	6.5	...	18	59	10.45	3	28	4.4	2	0.13
655	R Aquilæ Var. 2	9.3	1	18	59	46.23	51	58	30.2	1	0.56
656	41 Sagittarii ν	4.5	...	19	1	36.77	111	14	16.6	2	0.57
657	... ..	8.0	1	19	3	1.64	139	23	47.1	1	0.53
658	T Sagittarii Var. 3	9.0	3	19	3	19.76	107	12	28.3	4	0.61
659	R Sagittarii Var. 1	8.9	3	19	3	39.23	109	32	43.4	2	0.68
660	... ..	5.4	2	19	9	59.43	107	9	46.0	3	0.60

631—632—636—643—645—646—647.—Comparison stars for Donati's Comet of 1858.

635.— γ^1 Sagittarii Var. 6.—Period 759 days.—Range, 5th to 6th magnitude

637.—Observed by mistake for Amphitrite.

648.— β Lyræ Var. 1.—Period 1291 days.—Range, 3.5 to 4.5 magnitude.

650.—13 Lyræ Var. 2.—Period 43 days.—Range, 4.2 to 4.6 magnitude

651.—282 Carinae

655.—R Aquilæ Var. 2.—Period 345 days.—Range, 0.5 to 11th magnitude.

658.—T Sagittarii Var. 3.—Period 381 days.—Range, 7.5 magnitude to invisibility

659.—R Sagittarii Var. 1.—Period 270 days.—Range, 7th magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
631	...	+ 4.1446	+ 0.0049	..	+ 1.814	- 0.601	...	...
632	7501 Lacaille	+ 4.1578	+ 0.0042	...	+ 1.008	- 0.606	...	...
633	...	+ 4.2267	+ 0.0042	...	+ 0.844	- 0.616	...	...
634	4 Sagittarii b	+ 3.6614	+ 0.0028	- 0.005	+ 0.750	- 0.533	+ 0.04	6077
635	γ ¹ Sagittarii Var. 0.	+ 3.8310	+ 0.0022	...	+ 0.326	- 0.559	...	6107
636	...	+ 4.2650	+ 0.0007	...	- 0.241	- 0.622	...	...
637	...	+ 3.8666	+ 0.0007	...	- 0.416	- 0.564	..	...
638	13 Sagittarii μ ¹	+ 3.6875	+ 0.0009	- 0.004	- 0.487	- 0.523	+ 0.01	6168
639	...	+ 3.9200	+ 0.0008	...	- 0.527	- 0.572	...	...
640	23 Urs. Min. 3	+ 10.3952	- 0.4838	+ 0.048	- 1.446	+ 2.823	- 0.08	6281
641	22 Sagittarii λ	+ 3.7073	- 0.0013	- 0.005	- 1.706	- 0.537	+ 0.24	6263
642	3 ¹ Telescopii	+ 4.4428	- 0.0057	...	- 1.913	- 0.642	...	6292
643	...	+ 4.4239	- 0.0073	...	- 2.462	- 0.640	...	...
644	3 Lyræ α	+ 2.0130	+ 0.0016	- 0.017	- 2.817	- 0.290	- 0.28	6355
645	...	+ 4.4976	- 0.0103	...	- 3.115	- 0.647	...	...
646	7572 Lacaille	+ 4.4694	- 0.0122	...	- 3.677	- 0.639	...	...
647	7578 Lacaille	+ 4.4655	- 0.0124	...	- 3.725	- 0.638	...	...
648	10 Lyræ β Var. 1	+ 2.2137	+ 0.0015	- 0.002	- 3.914	- 0.315	+ 0.03	6429
649	...	+ 4.5134	- 0.0142	...	- 4.069	- 0.643	...	...
650	13 Lyræ Var. 2	+ 1.8232	+ 0.0008	- 0.001	- 4.440	- 0.257	0.00	6473
651	...	+ 5.3223	- 0.0307	...	- 4.510	- 0.754	...	...
652	30 Sagittarii ο	+ 3.5944	- 0.0053	+ 0.001	- 4.892	- 0.506	+ 0.05	6507
653	17 Aquilæ 3	+ 2.7578	+ 0.0003	- 0.006	- 5.116	- 0.387	+ 0.07	6528
654	131 R. P. L.	- 18.2384	- 1.6194	...	- 5.121	+ 1.027	...	...
655	R Aquilæ Var. 2	+ 2.8900	- 0.0003	...	- 5.171	- 0.405	...	...
656	41 Sagittarii π	+ 3.5730	- 0.0057	- 0.004	- 5.327	- 0.500	+ 0.03	6548
657	...	+ 4.5733	- 0.0209	...	- 5.446	- 0.640	..	..
658	T Sagittarii Var. 3	+ 3.4670	- 0.0054	...	- 5.801	- 0.480	...	...
659	R Sagittarii Var. 1	+ 3.3256	- 0.0060	...	- 5.918	- 0.488	...	...
660	...	+ 3.4659	- 0.0055	...	- 6.025	- 0.479	...	...

650.—Proper Motion in Polar Distance from "Greenwich Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
661	... ..	8.0	1	19	9	59.60	146	13	2.1	1	0.52
662	25 Aquilæ ω	5.7	...	19	11	23.11	78	33	57.4	5	0.63
663	44 Sagittarii ρ^1	4.5	...	19	13	43.46	108	6	7.1	2	0.50
664	45 Sagittarii ρ^2	5.5	...	19	13	51.24	109	33	32.8	1	0.64
665	30 Aquilæ δ	3.5	...	19	18	35.33	87	9	20.4	4	0.64
666	8059 Taylor	6.0	1	19	22	3.94	143	23	11.1	1	0.52
667	52 Sagittarii λ^2	5.0	...	19	28	21.93	115	10	57.8	2	0.61
668	... ..	5.7	...	19	31	32.04	143	15	37.3	1	0.52
669	R Cygni Var. 3	10.3	1	19	33	10.30	40	4	55.5	1	0.64
670	50 Sagittarii f	5.3	...	19	38	22.08	110	5	8.1	1	0.42
671	50 Aquilæ γ	3.0	...	19	39	44.64	79	43	5.3	5	0.66
672	53 Aquilæ α (<i>Altair</i>)	1.3	...	19	44	5.86	81	29	28.1	2	0.67
673	χ Cygni Var. 2	5.7	1	19	45	17.88	57	25	51.3	1	0.58
674	55 Aquilæ η Var. 1	5.0	2	19	45	29.50	89	20	36.6	2	0.65
675	60 Aquilæ β	4.3	...	19	48	34.88	83	55	59.2	5	0.69
676	... ..	8.5	1	19	49	28.86	145	56	59.3	1	0.53
677	... ..	9.2	1	19	52	55.25	147	11	2.4	1	0.64
678	λ Ursæ Minoris	6.3	...	20	1	3.90	1	6	4.3	3	0.15
679	R Capricorni Var. 1	9.9	2	20	3	37.14	104	40	13.6	2	0.71
680	... ..	8.2	1	20	4	6.47	147	14	43.1	1	0.53
681	... ..	9.2	1	20	7	38.36	81	22	38.0	1	0.70
682	R Sagittæ Var. 1	9.7	2	20	7	49.50	73	41	10.8	2	0.67
683	5 Capricorni α^1	4.0	...	20	10	3.01	102	55	45.7	1	0.50
684	6 Capricorni α^2	3.5	...	20	10	26.98	102	58	1.1	7	0.64
685	34 Cygni Var. 1	5.9	3	20	12	44.35	52	23	30.3	3	0.72
686	α Pavonis	3.0	...	20	14	47.13	147	10	14.4	1	0.57
687	8441 Lacaille	5.6	1	20	18	9.46	121	7	9.6	1	0.76
688	11 Capricorni ρ	5.0	...	20	21	2.49	105	15	50.2	12	0.67
689	... ..	8.3	1	20	27	46.43	143	16	38.9	1	0.76
690	24 Cephei (<i>Hev</i>) Var. 4	7.9	1	20	28	56.11	1	17	22.1	1	0.77

669.—R Cygni Var. 3.—Period 425 days.—Range, 7th magnitude to invisibility.

673.— χ Cygni Var. 2.—Period 406 days.—Range, 4th magnitude to invisibility.674.— η Aquilæ Var. 1.—Period 7150 days.—Range, 3.5 to 4.7 magnitude.

679.—R Capricorni Var. 1.—Period 347 days.—Range, 9th magnitude to invisibility.

682.—R Sagittæ Var. 1.—Period 70.4 days.—Range, 8.3 to 10.3 magnitude.

685.—34 Cygni Var. 1.—Supposed to vary from 3rd to 6th magnitude in many years.

690.—145 R P L = 24 Cephei (*Hev*) Var. 4.—Changes from 5th to 11th magnitude in many years.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	"	"	"	
661	... ..	+ 4.9781	- 0.0328	...	- 6.030	- 0.689	...	...
662	25 Aquilæ α ...	+ 2.8165	- 0.0008	- 0.003	- 6.146	- 0.388	- 0.02	6595
663	44 Sagittarii ρ^1 ..	+ 3.4867	- 0.0061	- 0.003	- 6.340	- 0.490	- 0.03	6610
664	45 Sagittarii ρ^2 ..	+ 3.4979	- 0.0062	+ 0.007	- 6.351	- 0.481	+ 0.05	6620
665	30 Aquilæ δ ...	+ 3.0094	- 0.0018	- 0.014	- 6.744	- 0.410	- 0.10	6646
666	8950 Taylor ...	+ 4.7625	- 0.0327	...	- 7.029	- 0.647	...	6669
667	52 Sagittarii λ^2 ..	+ 3.6513	- 0.0102	- 0.002	- 7.543	- 0.400	- 0.02	6706
668	... ..	+ 3.7222	- 0.0358	...	- 7.798	- 0.631	...	...
669	R Cygni Var. 3 ...	+ 1.6129	+ 0.0015	...	- 7.981	- 0.213	...	...
670	56 Sagittarii <i>f</i> ...	+ 3.5166	- 0.0091	...	- 8.346	- 0.462	...	6760
671	50 Aquilæ γ ..	+ 2.8520	- 0.0011	+ 0.001	- 8.483	- 0.373	0.00	6772
672	53 Aquilæ ϵ ...	+ 2.8922	- 0.0014	+ 0.036	- 8.600	- 0.374	- 0.39	6802
673	χ Cygni Var. 2 ...	- 2.3067	+ 0.0013	...	- 8.895	- 0.297	...	...
674	55 Aquilæ η Var. 1 ..	+ 3.0594	- 0.0081	- 0.001	- 8.908	- 0.396	+ 0.04	6811
675	60 Aquilæ β ...	+ 2.9455	- 0.0020	+ 0.002	- 9.151	- 0.378	+ 0.47	6833
676	... ..	+ 4.8290	- 0.0479	...	- 9.223	- 0.621	...	...
677	... ..	+ 4.8088	- 0.0523	...	- 9.486	- 0.626	...	...
678	λ Ursæ Minoris ...	+ 57.0008	- 29.8260	- 0.035	- 10.109	+ 7.185	- 0.01	6990
679	R Capricorni Var. 1 ...	+ 3.3724	- 0.0087	...	- 10.301	- 0.418	...	...
680	... ..	+ 4.8530	- 0.0563	...	- 10.337	- 0.602	...	...
681	... ..	+ 2.9000	- 0.0017	...	- 10.600	- 0.354	...	...
682	R Sagittæ Var. 1 ...	+ 2.7400	- 0.0020	...	- 10.617	- 0.186	...	...
683	5 Capricorni α^1 ..	+ 3.3309	- 0.0084	- 0.002	- 10.779	- 0.406	0.00	6972
684	6 Capricorni α^2 ...	+ 3.3313	- 0.0084	+ 0.001	- 10.810	- 0.403	0.00	6974
685	34 Cygni Var. 1 ...	+ 2.2101	+ 0.0019	...	- 10.977	- 0.265	...	6990
686	α Pavonis ...	+ 4.7960	- 0.0594	0.000	- 11.127	- 0.594	+ 0.10	7004
687	8441 Lacaille ...	+ 3.7360	- 0.0182	...	- 11.371	- 0.444	...	...
688	11 Capricorni ρ ...	+ 3.4323	- 0.0116	- 0.006	- 11.578	- 0.403	+ 0.01	7042
689	... ..	+ 4.5044	- 0.0515	...	- 12.053	- 0.520	...	...
690	24 Cephei (<i>Her</i>) V. 4.	- 44.2190	- 23.0005	...	- 12.134	+ 5.140	...	7154

690.—Proper Motion adopted from "Stone's Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations	Mean Right Ascension.			Mean Polar Distance.			Observations	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
691	... ..	9.0	1	20	29	40.82	143	52	14.6	1	0.75
692	143 R. P. L. ...	6.7	...	20	29	50.61	5	18	42.2	1	0.76
693	... ..	8.1	1	20	30	47.79	149	55	34.7	1	0.77
694	S Capricorni Var. 2	9.2	2	20	33	53.85	109	32	34.3	2	0.67
695	... ..	9.0	2	20	36	44.83	73	23	17.2	2	0.65
696	50 Cygni α (Deneb)	1.7	...	20	36	45.61	45	12	29.3	1	0.57
697	S Delphin Var. 2	8.9	1	20	36	46.06	73	21	9.9	1	0.77
698	... ..	9.3	1	20	38	4.22	143	3	29.6	1	0.76
699	2 Aquarii α	4.0	...	20	40	15.30	99	59	42.4	1	0.65
700	8571 Lacaille	7.7	1	20	42	48.35	150	13	10.8	1	0.77
701	9633 Taylor	7.0	1	20	44	30.80	101	57	0.6	1	0.50
702	6 Aquarii μ	5.0	...	20	45	15.65	99	29	42.9	1	0.65
703	... ..	8.9	1	20	47	35.56	149	2	5.8	1	0.77
704	32 Vulpeculæ	5.5	...	20	48	43.21	62	27	41.9	2	0.68
705	... ..	9.4	1	20	53	53.28	142	59	27.0	1	0.76
706	R Vulpeculæ Var. 2	10.0	2	20	58	23.33	66	42	54.9	2	0.69
707	... ..	9.9	1	20	58	30.79	148	52	55.0	1	0.77
708	9772 Taylor (1st)	7.5	1	21	0	23.07	145	7	32.1	1	0.70
709	67 Cygni (1st)	5.3	...	21	0	45.44	51	53	22.8	1	0.63
710	13 Aquarii ν	5.0	...	21	2	7.61	101	55	27.4	2	0.50
711	64 Cygni 3	3.5	...	21	7	6.31	60	20	1.6	6	0.74
712	8748 Lacaille	8.9	1	21	9	43.32	145	7	56.0	1	0.70
713	22 Aquarii β	3.0	...	21	24	20.65	96	10	20.1	11	0.74
714	... ..	9.0	1	21	25	45.04	140	23	42.6	1	0.70
715	23 Aquarii 1	5.3	...	21	30	27.30	98	28	1.5	3	0.65
716	10032 Taylor	6.3	1	21	30	37.36	142	58	30.5	1	0.76
717	10063 Taylor	6.2	1	21	34	23.88	145	7	22.2	1	0.77
718	8 Pegasi ϵ	2.3	...	21	37	27.38	80	45	6.2	6	0.73
719	μ Cephei Var. 1	5.4	3	21	39	18.86	31	50	51.5	3	0.72
720	16 Pegasi	5.5	...	21	46	49.73	64	43	7.4	8	0.76
721	10120 Taylor	6.0	1	21	51	1.58	146	32	12.3	1	0.78
722	... ..	9.7	2	21	53	46.70	150	49	33.8	2	0.74
723	... ..	9.3	1	21	58	8.61	136	2	51.4	1	0.70
724	34 Aquarii α	3.0	...	21	58	44.70	90	59	3.8	8	0.76
725	... ..	9.6	2	22	5	21.21	101	6	5.4	2	0.76

692.—3128 Carriagton.

694.—S Capricorni Var. 2.—Supposed to change from 9th to 11th magnitude.

697.—S Delphin Var. 2.—Period 276 days.—Range, 8th to 11th magnitude.

706.—R Vulpeculæ Var. 2.—Period 137 days.—Range, 7.5 to 13th magnitude.

719.— μ Cephei Var. 1.—Changes irregularly from 4th to 6th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
691	... ..	+ 15267	- 0.0535	...	- 12.157	- 0.519	...	...
692	143 R. P. 1. ...	- 83124	- 1.2561	...	- 12.198	+ 0.971	...	...
693	... ..	+ 48989	- 0.0742	...	- 12.264	- 0.561	...	...
694	S Capricorni Var. 2.	+ 34456	- 0.0128	...	- 12.477	- 0.385	...	...
695	... ..	+ 27629	+ 0.0042	...	- 12.672	- 0.307	...	...
696	50 Cygni a ...	2 0432	+ 0.0021	- 0.002	- 12.673	- 0.226	0.00	7171
697	S Delphini Var. 2 ...	+ 27032	+ 0.0002	...	- 12.673	- 0.307	...	...
698	... ..	+ 44427	- 0.0042	...	- 12.761	- 0.495	...	...
699	2 Aquarii ...	+ 32223	- 0.0084	- 0.001	- 12.908	- 0.356	+ 0.01	7196
700	8571 Lacaille ...	+ 48419	- 0.0069	...	- 13.078	- 0.529	...	...
701	9633 Taylor ...	+ 32849	- 0.0093	...	- 13.191	- 0.355	...	7293
702	6 Aquarii μ ...	+ 32399	- 0.0083	0.000	- 13.241	- 0.349	+ 0.04	7299
703	... ..	+ 47306	- 0.0744	...	- 13.393	- 0.507	...	...
704	32 Vulpeculæ ...	+ 25554	+ 0.0026	- 0.002	- 13.467	- 0.270	0.00	7256
705	... ..	+ 43593	- 0.0553	...	- 13.798	- 0.455	...	...
706	R Vulpeculæ Var. 2...	+ 26624	+ 0.0022	...	- 14.080	- 0.271	...	...
707	... ..	+ 46483	- 0.0757	...	- 14.088	- 0.476	...	...
708	9772 Taylor (1st)	+ 44263	- 0.0624	...	- 14.205	- 0.449	...	...
709	61 Cygni (1st)	+ 23337	+ 0.0044	+ 0.339	- 14.232	- 0.233	- 3.22	7396
710	13 Aquarii γ ...	+ 32699	- 0.0038	+ 0.001	- 14.312	- 0.328	+ 0.01	7344
711	64 Cygni 3 ...	+ 25504	+ 0.0038	- 0.003	- 14.614	- 0.248	+ 0.07	7368
712	8748 Lacaille ...	+ 43701	- 0.0634	...	- 14.770	- 0.425	...	...
713	22 Aquarii β ...	+ 31623	- 0.0071	- 0.001	- 15.605	- 0.282	0.00	7478
714	... ..	+ 40793	- 0.0516	...	- 15.651	- 0.363	...	...
715	23 Aquarii 1 ...	+ 31930	- 0.0043	+ 0.004	- 15.934	- 0.276	+ 0.04	7514
716	10032 Taylor ...	+ 41474	- 0.0584	...	- 15.944	- 0.359	...	7513
717	10065 Taylor ...	+ 42103	- 0.0649	...	- 16.142	- 0.357	...	7540
718	8 Pegasi ϵ ...	+ 29452	- 0.0405	+ 0.003	- 16.300	- 0.242	0.00	7561
719	μ Cephei Var. 1 ...	+ 18323	+ 0.0039	...	- 16.394	- 0.147	...	7582
720	16 Pegasi ...	+ 27254	+ 0.0052	+ 0.001	- 16.764	- 0.210	+ 0.01	7627
721	10190 Taylor ...	+ 41513	- 0.0695	...	- 16.963	- 0.316	...	7645
722	... ..	+ 43254	- 0.0872	...	- 17.089	- 0.323	...	...
723	... ..	+ 37752	- 0.0430	...	- 17.267	- 0.272	...	...
724	34 Aquarii a ...	+ 30836	- 0.0041	- 0.003	- 17.314	- 0.219	+ 0.02	7688
725	... ..	+ 31979	- 0.0092	...	- 17.598	- 0.216	...	...

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
726	... ..	7.9	1	22	9	2.21	98	22	24.4	1	0.78
727	... ..	9.0	1	22	9	3.86	146	27	35.2	1	0.76
728	43 Aquarii θ	4.5	...	22	9	36.11	98	27	51.3	1	0.65
729	48 Aquarii γ	3.7	...	22	14	34.67	92	4	36.0	2	0.82
730	... ..	8.8	1	22	15	17.87	82	47	40.5	1	0.79
731	... ..	9.6	1	22	18	46.99	140	46	3.8	1	0.76
732	150 R. P. L.	5.3	...	22	23	42.20	4	35	0.1	6	0.11
733	27 Cephei δ Var. 2	5.6	4	22	24	5.38	32	17	9.6	4	0.70
734	... ..	9.8	1	22	24	36.10	146	50	51.5	1	0.76
735	... ..	8.0	1	22	25	48.37	111	30	31.5	1	0.76
736	62 Aquarii η	3.7	...	22	28	18.89	90	49	22.6	2	0.76
737	10477 Taylor	6.0	1	22	32	3.46	148	8	5.9	1	0.77
738	42 Pegasi 3	3.3	...	22	34	37.67	79	52	59.1	4	0.79
739	... ..	6.6	1	22	37	35.40	145	46	57.5	1	0.76
740	XXII. 844 W. B. E.	8.9	1	22	40	31.06	87	48	59.4	1	0.73
741	... ..	9.1	2	22	40	48.46	142	38	20.6	2	0.82
742	... ..	9.7	2	22	41	40.08	145	33	19.6	2	0.79
743	... ..	7.9	2	22	44	46.65	148	34	51.0	2	0.81
744	S Aquarii Var. 2	8.8	2	22	49	48.58	111	4	26.7	2	0.81
745	24 Pis. Aus. a (<i>Fomalhaut</i>)	1.3	...	22	50	4.39	120	20	51.7	8	0.81
746	... ..	9.2	1	22	51	22.53	151	33	39.0	1	0.77
747	... ..	9.3	1	22	51	47.53	85	26	50.2	1	0.78
748	9353 Lacaille	6.0	1	22	56	32.24	144	41	51.1	1	0.60
749	... ..	9.0	1	22	57	7.80	149	38	17.9	1	0.85
750	53 Pegasi β Var. 1 (<i>Scheat</i>)	2.0	...	22	57	8.24	62	39	36.2	1	0.76
751	54 Pegasi a (<i>Markab</i>)	2.0	...	22	57	56.24	75	31	54.2	4	0.81
752	... ..	9.8	1	22	59	16.44	150	22	56.9	1	0.77
753	9377 Lacaille	6.5	2	23	2	8.71	151	18	22.3	2	0.82
754	90 Aquarii ϕ	4.7	...	23	7	13.63	96	47	14.0	1	0.66
755	9405 Lacaille	5.2	4	23	7	22.77	150	26	25.0	4	0.81
756	6 Piscium γ	4.3	...	23	10	3.75	87	27	57.7	8	0.82
757	... ..	9.8	1	23	11	2.08	151	16	3.7	1	0.77
758	... ..	8.6	1	23	11	15.10	136	54	41.3	1	0.87
759	... ..	8.5	1	23	12	4.13	137	4	14.6	1	0.69
760	96 Aquarii	5.5	1	23	12	17.65	95	32	51.1	1	0.66

732.—2820 Groombridge

733.— δ Cephei Var. 2.—Period 6.366 days.—Range, 3.7 to 4.8 magnitude

744.—S Aquarii Var. 2.—Period 279 days.—Range, 8th magnitude to invisible

750.— β Pegasi Var. 1.—Period about 6 weeks.—Range, 2.0 to 2.5 magnitude

Observed with the Madras Meridian Circle in that Year.

Number	Star	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
726	... ..	+ 3 1637	- 0 0077	...	- 17 750	- 0 207	...	...
727	... ..	+ 4 0088	- 0 0035	...	- 17 751	- 0 264	...	...
728	43 Aquarii θ ..	+ 3 1641	- 0 0075	+ 0 006	- 17 773	- 0 205	+ 0 03	7773
729	48 Aquarii γ ..	+ 3 0935	- 0 0042	+ 0 007	- 17 071	- 0 191	- 0 02	7795
730	... ..	+ 2 9975	0 0000	...	- 17 098	- 0 185	...	...
731	... ..	+ 3 7720	- 0 0616	...	- 19 131	- 0 227	...	...
732	150 R. P. L. ..	- 3 7312	- 1 1665	+ 0 048	- 18 310	+ 0 230	- 0 05	7831
733	27 Cephei δ Var. 2 ..	+ 2 2122	+ 0 0165	+ 0 002	- 18 325	- 0 123	+ 0 02	7849
734	... ..	+ 3 8997	- 0 0676	...	- 18 343	- 0 221	...	...
735	... ..	+ 3 7489	- 0 0527	...	- 18 385	- 0 210	...	...
736	62 Aquarii η ..	+ 3 0795	- 0 0031	+ 0 003	- 18 472	- 0 166	+ 0 06	7868
737	10477 Taylor ..	+ 3 8773	- 0 0708	...	- 18 597	- 0 203	...	7889
738	42 Pegasi δ ..	+ 2 0851	+ 0 0023	+ 0 001	- 18 680	- 0 149	0 00	7909
739	... ..	+ 3 7639	- 0 0622	...	- 18 772	- 0 185	...	...
740	XXII 844 W. B. E ..	+ 3 0547	- 0 0012	...	- 18 601	- 0 143	...	...
741	... ..	+ 3 6652	- 0 0534	...	- 18 870	- 0 162	...	...
742	... ..	+ 3 7013	- 0 0604	...	- 18 981	- 0 166	...	...
743	... ..	+ 3 7776	- 0 0697	...	- 18 985	- 0 169	...	...
744	S Aquarii Var. 2 ..	+ 3 2275	- 0 0140	...	- 19 121	- 0 134	...	...
745	24 Piscis Aust. α ..	+ 3 3071	- 0 0210	+ 0 022	- 19 130	- 0 135	+ 0 18	7992
746	... ..	+ 3 8003	- 0 0706	...	- 19 162	- 0 155	...	...
747	... ..	+ 3 0409	+ 0 0005	...	- 19 174	- 0 122	...	...
748	9353 Lacaille ..	+ 3 6883	- 0 0559	...	- 19 291	- 0 135	...	8029
749	... ..	+ 3 6903	- 0 0705	...	- 19 305	- 0 138	...	...
750	53 Pegasi β Var. 1 ..	+ 2 8949	+ 0 0117	+ 0 014	- 19 306	- 0 106	- 0 15	8082
751	54 Pegasi α ..	+ 2 9797	+ 0 0056	+ 0 003	- 19 324	- 0 107	+ 0 02	8084
752	... ..	+ 3 6878	- 0 0728	...	- 19 355	- 0 133	...	...
753	9377 Lacaille ..	+ 3 6822	- 0 0753	...	- 19 419	- 0 126	...	8061
754	99 Aquarii ϕ ...	+ 3 1084	- 0 0045	+ 0 001	- 19 525	- 0 096	+ 0 19	8085
755	9405 Lacaille ..	+ 3 6086	- 0 0708	...	- 19 529	- 0 111	...	8086
756	6 Piscium γ ..	+ 3 0591	+ 0 0005	+ 0 047	- 19 582	- 0 087	+ 0 01	8105
757	... ..	+ 3 5992	- 0 0721	...	- 19 599	- 0 103	...	...
758	... ..	+ 3 3738	- 0 0382	...	- 19 603	- 0 098	...	...
759	... ..	+ 3 3705	- 0 0384	...	- 19 618	- 0 094	...	...
760	69 Aquarii ..	+ 3 1005	- 0 0038	+ 0 011	- 19 622	- 0 085	+ 0 01	8119

750—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1863 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year
				h.	m.	s.	°	'	"		
761	4040 Groombridge	7.0	1	23	12	55.84	7	3	35.0	1	0.82
762	10748 Taylor	6.9	3	23	17	29.43	147	30	3.1	3	0.83
763	"	9.9	1	23	19	38.74	151	38	24.2	1	0.77
764	8 Piscium κ	6.0	...	23	19	54.55	89	29	39.4	12	0.80
765	"	9.3	2	23	20	59.84	137	28	4.5	2	0.76
766	"	8.3	1	23	23	33.84	148	57	55.0	1	0.85
767	10804 Taylor	6.4	3	23	27	26.43	147	34	53.7	3	0.91
768	"	8.8	1	23	27	42.50	148	15	5.2	1	0.76
769	158 R. P. L.	5.7	...	23	27	49.86	3	26	54.5	11	0.46
770	"	9.5	2	23	29	51.20	137	20	25.6	12	0.76
771	"	8.4	1	23	30	21.40	148	57	0.4	1	0.85
772	17 Piscium ι	4.3	...	23	32	54.27	85	6	58.2	11	0.80
773	"	9.2	1	23	34	17.16	147	27	44.8	1	0.84
774	"	9.2	1	23	36	33.67	106	2	41.7	1	0.74
775	8 Sculptoris	4.5	...	23	41	47.09	118	53	16.5	13	0.81
776	"	8.6	2	23	42	0.27	150	50	15.8	2	0.83
777	9638 Lacaille	7.8	2	23	46	58.37	150	18	10.5	2	0.81
778	R Cassiopeæ Var. 3	9.5	1	23	51	27.44	39	22	30.2	1	0.74
779	"	9.4	1	23	51	55.53	143	16	15.8	1	0.87
780	28 Piscium ω	4.0	...	23	52	16.60	83	53	43.1	6	0.60
781	10990 Taylor	9.2	2	23	56	50.88	148	35	30.0	2	0.82
782	10994 Taylor	8.0	1	23	57	44.29	147	36	20.6	1	0.77

769.—4101 Groombridge.

778.—R Cassiopeæ Var. 3.—Period 426 days.—Range, 5th magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number	Star.	In Right Ascension			In Polar Distance			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
761	4040 Groombridge ..	+ 2 1835	+ 0 0392	..	- 19 634	- 0 057	..	8122
762	10743 Taylor ..	+ 3 4605	- 0 0582	..	- 19 711	- 0 085	..	8157
763	... ..	+ 3 5059	- 0 0703	..	- 19 745	- 0 081	..	..
764	8 Piscium α	+ 3 0699	0 0000	+ 0 005	- 19 750	- 0 069	+ 0 12	8169
765	.. ..	+ 3 3189	- 0 0375	..	- 19 765	- 0 074	..	..
766	.. ..	+ 3 4238	- 0 0605	..	- 19 802	- 0 070	..	..
767	10804 Taylor ..	+ 3 3701	- 0 0555	..	- 19 853	- 0 060	..	8208
768	... ..	+ 3 3755	- 0 0572	..	- 19 856	- 0 060	..	..
769	158 R. P. L.	- 0 0318	- 0 4961	+ 0 084	- 19 858	+ 0 010	- 0 01	8213
770	.. ..	+ 3 2624	- 0 0360	..	- 19 882	- 0 053	..	..
771	... ..	+ 3 3585	- 0 0583	..	- 19 887	- 0 054	..	..
772	17 Piscium ϵ	+ 3 0594	+ 0 0030	+ 0 025	- 19 916	- 0 042	+ 0 45	8233
773	.. ..	+ 3 3067	- 0 0532	..	- 19 929	- 0 044	..	..
774	... ..	+ 3 1110	- 0 0081	..	- 19 953	- 0 037	..	..
775	8 Sculptoris ..	+ 3 1305	- 0 0161	+ 0 009	- 19 992	- 0 026	+ 0 10	8275
776	.. ..	+ 3 2600	- 0 0580	..	- 19 993	- 0 028	..	..
777	9638 Lacaille ..	+ 3 2052	- 0 0557	..	- 20 023	- 0 017	..	..
778	R Cassiopeæ Var 3 ...	+ 3 0114	+ 0 0364	..	- 20 041	- 0 007	..	..
779	... ..	+ 3 1352	- 0 0402	..	- 20 042	- 0 007	..	..
780	28 Piscium ω ..	+ 3 0671	+ 0 0047	+ 0 010	- 20 044	- 0 005	+ 0 13	8331
781	10990 Taylor ..	+ 3 1022	- 0 0482	..	- 20 063	+ 0 003	..	..
782	10994 Taylor ..	+ 3 0280	- 0 0495	..	- 20 064	+ 0 005	..	..

775.—Proper motions adopted from "*St. ne's Catalogue*."

SEPARATE RESULTS
OF
OBSERVATIONS
MADE WITH THE
MADRAS MERIDIAN CIRCLE
IN THE YEAR
1864.

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
1	11010 Taylor...	Nov. 10	M	0	0	29.80	5	147	35	39.1	7.9
2	.. ..	Nov. 8	M	0	0	42.06	...	151	23	53.2	9.1
3	21 Andromeda α ...	Oct. 20	R	0	1	21.80	...	61	39	40.3	...
	.. ..	" 22	R		1	21.62	..		39	39.9	...
	.. ..	" 24	R		1	21.69	...		39	40.7	...
	.. ..	" 25	R		1	21.47	...		39	38.8	...
	.. ..	" 26	R		1	21.72	..		39	39.7	...
	.. ..	" 28	R		1	21.67	..		39	38.9	...
	.. ..	Nov. 7	M		1	21.73	..		39	39.8	...
	.. ..	Dec. 1	M		1	21.72	...		39	40.4	...
	.. ..	" 2	M		1	21.72	..		39	41.1	...
4	9739 Lacaille...	Sep. 28	R	0	2	3.98	...	130	29	34.8	7.5
	.. ..	Oct. 5	M		2	4.07	...		29	37.8	7.7
5	7 Taylor ..	Sep. 15	M	0	2	57.47	...	93	19	4.6	7.1
6	3 Lacaille ...	Nov. 3	M	0	6	6.66	...	148	40	15.3	6.6
7	88 Pegasi γ ...	Oct. 11	M	0	6	14.00	...	75	34	23.8	...
	.. ..	" 15	M		6	14.06	...		34	24.2	...
	.. ..	" 20	R		6	14.07	...		34	23.1	...
	.. ..	" 22	R		6	14.22	5		34	23.0	...
	.. ..	" 24	R		6	14.12	..		34	24.0	...
	.. ..	" 25	R		6	14.17	...		34	23.8	...
	.. ..	" 26	R		6	13.95	...		34	23.1	...
	.. ..	" 28	R		6	14.08	..		34	22.7	...
	.. ..	Dec. 2	M		6	14.08	..		34	24.0	...
8	.. ..	Sep. 27	R	0	6	39.31	5	131	7	0.9	9.2
	.. ..	Oct. 7	M		6	39.58	..		7	1.4	9.7
9	.. ..	Nov. 5	M	0	9	22.56	5	149	31	50.5	8.7
10	.. ..	Nov. 8	M	0	9	33.24	...	153	55	6.7	9.0
	.. ..	" 11	M		9	33.23	3		55	7.5	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance 1864.			Magnitude.
				A.	m.	s.		°	'	"	
11	41 Lacaille	Sep. 28	R	0	12	33.47	...	130	52	4.2	8.0
	...	Oct. 28	R		12	33.60	...		52	1.8	8.2
12	...	Sep. 27	R	0	12	47.24	...	150	26	39.0	8.7
	...	Nov. 2	M		12	47.13	3		26	38.3	8.6
	...	" 12	M		12	47.51	...		26	39.0	8.9
13	41 Piscium d...	Sep. 15	M	0	13	36.04	...	82	33	54.6	5.6
	...	" 16	R		13	36.02	...		33	55.3	5.6
14	...	Nov. 8	M	0	18	31.22	...	152	57	38.6	9.0
15	81 Lacaille	Sep. 29	R	0	18	38.22	...	180	0	39.9	7.2
16	12 Ceti	Oct. 24	R	0	23	5.83	...	94	42	34.7	...
	...	" 27	R		23	5.91	...		42	34.1	...
	...	Nov. 5	M		23	5.79	...		42	34.8	...
	...	" 7	M		23	5.86	...		42	34.0	...
	...	" 11	M		23	5.87	...		42	35.0	...
	...	" 12	M		23	5.90	...		42	35.8	...
	...	Dec. 2	M		23	5.88	...		42	35.4	...
	...	" 3	M		23	5.86	...		42	34.8	...
17	T Piscium Var. 3	Oct. 28	R	0	24	57.60	3	76	9	0.4	10.6
	...	Aug. 19	R	0	27	7.96	...	76	14	7.7	8.0
	...	Sep. 27	R		27	7.68	...		14	7.9	8.6
18	...	Oct. 15	M		27	7.74	...		14	8.7	8.0
19	132 Lacaille	Nov. 8	M	0	27	19.38	6	151	53	55.9	9.0
20	970 Lalande	Dec. 6	M	0	31	4.54	5	80	55	9.4	7.7
21	1010 Lalande	Oct. 24	R	0	32	15.52	...	82	32	27.6	9.5
	...	Nov. 2	M		32	15.49	...		32	27.2	9.1
22	18 Cassiopea e Var. 2.	Dec. 3	M	0	32	49.14	...	34	12	34.7	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distances. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
23	16 Ceti β ...	Oct. 22	R	0	36	45.69	...	108	44	13	...
	... ..	" 24	R		36	45.64	...		44	2.0	...
	... ..	Nov. 3	M		36	45.64	...		44	0.7	...
	... ..	" 7	M		36	45.77	...		44	0.0	...
	... ..	" 11	M		36	45.59	...		44	1.2	...
	... ..	Dec. 2	M		36	45.64	...		44	2.3	...
	... ..	" 3	M		36	45.61	...		44	1.7	...
	... ..	" 5	M		36	45.69	...		44	1.1	...
	... ..	" 6	M		36	45.68	...		44	1.6	...
	... ..	" 7	M		36	45.59	...		44	1.2	...
	... ..	" 8	M		36	45.62	...		44	2.0	...
24	0.628 W. B. E. ...	Nov. 5	M	0	36	54.12	4	93	49	29.0	...
25	... ..	Nov. 8	M	0	39	53.91	5	150	44	54.3	8.9
	... ..	" 12	M		39	54.09	...		44	55.0	9.1
26	53 Piscium ...	Oct. 13	M	0	39	55.34	...	78	46	8.8	5.0
27	63 Piscium δ ...	Aug. 19	R	0	41	37.53	4	83	9	21.1	...
	... ..	Oct. 13	M		41	37.56	3		9	22.4	...
	... ..	" 14	M		41	37.62	...		9	21.1	...
28	253 Lacaille ...	Nov. 8	M	0	47	67.75	3	153	36	39.3	6.0
29	... ..	Dec. 9	M	0	48	55.25	5	153	49	48.6	9.6
30	2 Ursæ Minoris <i>s.p.</i>	May 12	M	0	50	44.24	2	4	98	28.9	.
	... ..	Nov. 3	M		50	44.40	3		28	29.9	..
31	0.897 W. B. E. ...	Nov. 7	M	0	52	12.41	...	92	49	54.4	9.3
	... ..	Dec. 5	M		52	12.35	6		49	54.9	9.0
	... ..	" 6	M		52	12.25	3		49	56.1	9.2
32	271 Lacaille ...	Nov. 12	M	0	52	42.54	...	151	25	58.2	7.5
33	14 R. P. L. ... <i>s.p.</i>	May 21	M	0	53	58.25	2	3	34	53.8	...
34	70 Piscium ...	Dec. 1	M	0	55	2.48	...	82	47	38.2	6.9

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				A.	m.	s.		°	'	"	
35	71 Piscium ϵ ...	Jan. 1	M	0	55	53.10	...	62	50	36.7	..
	... ..	" 2	M		55	53.16	..		50	34.5	...
	... ..	" 4	M		55	53.23	...		50	35.5	...
	... ..	Sep. 16	R		55	53.34	...		50	35.1	...
	... ..	Nov. 10	M		55	53.09	...		50	35.5	...
	... ..	" 11	M		56	53.24	...		50	35.6	...
	... ..	" 29	R		55	53.20	...		50	35.8	...
	... ..	Dec. 8	M		55	53.33	2		50	34.7	...
36	29 Ceti	Nov. 5	M	1	0	58.99	...	68	43	8.5	6.7
37	33 Ceti	Jan. 1	M	1	3	33.49	.	68	16	45.8	..
	... ..	" 2	M		3	33.63	..		16	46.5	..
	... ..	" 4	M		3	33.55	...		16	45.9	...
38	86 Piscium ζ ...	Sep. 16	R	1	6	37.49	...	63	8	35.6	...
	... ..	Nov. 11	M		6	37.67	...		8	41.9	..
39	1 Urs. Min. α .. s.p.	Apl. 2	M	1	9	18.81	2	2	24	55.5	...
	 s.p.	" 6	M		9	17.85	3		24	56.0	..
	 s.p.	" 16	R		9	18.06	3		24	56.3	...
	 s.p.	" 26	R		9	19.09	3		24	57.4	...
	 s.p.	May 5	R		9	18.18	3		24	56.4	...
	 s.p.	" 28	R		9	18.54	3		24	57.5	...
	... ..	Oct. 27	R		9	17.96	3		24	56.9	...
	... ..	Nov. 22	R		9	17.88	3		24	57.0	..
40	... ..	Oct. 27	R	1	17	0.20	3	96	31	27.6	8.0
	... ..	Dec. 3	M		17	0.17	...		31	24.9	8.3
41	45 Ceti θ^1	Jan. 1	M	1	17	13.48	.	98	53	11.2	...
	... ..	" 2	M		17	13.53	...		53	11.1	...
	... ..	" 4	M		17	13.48	...		53	11.1	...
	... ..	Nov. 12	M		17	13.55	..		53	11.6	...
	... ..	" 29	R		17	13.57	...		53	12.3	...
	... ..	Dec. 6	M		17	13.43	...		53	12.1	...
42	... ..	Dec. 5	M	1	18	53.11	.	151	20	23.0	7.6

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
43	...	Nov. 2	M	1	23	28.19	..	57	43	65.8	8.2
44	99 Piscium γ	Jan. 1	M	1	24	12.69	...	75	21	24.9	...
	...	" 2	M		24	12.59	...		21	24.6	...
	...	" 4	M		24	12.53	...		21	24.6	...
	...	Oct. 14	M		24	12.66	...		21	24.8	...
	...	" 15	M		24	12.47	...		21	25.2	...
	...	Nov. 22	R		24	12.55	...		21	24.8	...
	...	" 29	R		24	12.55	...		21	25.0	...
	...	Dec. 1	M		24	12.57	...		21	24.3	...
	...	" 8	M		24	12.41	...		21	25.5	...
	...	" 9	M		24	12.40	...		21	25.4	...
45	...	Nov. 12	M	1	25	44.66	...	150	21	41.4	8.6
46	514 Taylor	Dec. 2	M	1	29	33.66	..	73	16	51.2	6.0
	...	" 3	M		29	33.51	...		16	51.3	6.1
47	...	Dec. 5	M	1	29	1.31	...	150	42	35.1	9.0
48	...	Nov. 23	R	1	31	23.00	..	130	52	19.2	8.0
49	• Eridani (Achernar).	Nov. 22	R	1	32	38.91	..	147	55	45.7	...
	...	" 29	R		32	38.93	...		55	45.2	...
	...	Dec 20	R		32	38.91	...		55	45.8	...
50	106 Piscium γ	Oct. 17	R	1	34	21.85	...	85	12	7.7	...
	...	Nov. 7	M		34	21.16	...		12	7.4	...
	...	" 24	R		34	21.32	...		12	7.0	...
	...	Dec. 1	M		34	21.29	...		12	8.1	...
	...	" 3	M		34	21.29	...		12	7.6	...
	...	" 6	M		34	21.30	...		12	7.9	...
51	503 Lacaille	Nov. 8	M	1	35	42.08	...	151	41	18.8	7.7
52	110 Piscium •	Oct. 14	M	1	38	12.88	5	51	31	42.7	...
	...	" 16	M		38	12.70	...		31	42.9	...
	...	Dec. 8	M		38	12.74	...		31	42.7	...
	...	" 9	M		38	12.79	...		31	42.4	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
53	...	Dec. 10	M	1	39	33.55	5	152	2	52.8	9.1
54	516 Lacaille ...	Nov. 11	M	1	39	58.43	...	151	42	9.3	7.0
	... ..	" 23	R		39	58.35	...		42	9.0	7.0
55	...	Nov. 7	M	1	40	9.24	...	149	57	57.1	9.4
56	V Piscium Var 5 ...	Nov. 29	R	1	47	7.59	3	81	53	9.4	10.0
57	6 Arietis β . . .	Oct. 17	R	1	47	7.86	...	69	51	31.8	...
	... ..	Nov. 14	M		47	7.90	...		51	31.8	...
	... ..	" 22	R		47	7.93	...		51	32.0	...
	... ..	" 24	R		47	7.85	...		51	31.5	...
	... ..	" 25	R		47	7.92	...		51	31.2	...
	... ..	Dec. 1	M		47	7.87	...		51	32.2	...
	... ..	" 3	M		47	7.95	...		51	31.5	...
58	...	Nov. 5	M	1	48	32.60	...	150	5	13.2	9.3
	...	Dec. 5	M		48	33.01	5		5	13.7	9.3
59	582 Lacaille ...	Dec. 10	M	1	50	51.77	...	145	44	21.5	8.1
60	593 Lacaille . . .	Jan. 4	M	1	52	2.53	5	149	8	13.6	...
61	...	Oct. 22	R	1	54	52.42	...	130	55	42.3	9.0
	... ..	Nov. 24	R		54	52.62	...		55	41.3	9.0
62	673 Taylor . . .	Nov. 12	M	1	56	18.31	...	73	24	8.3	6.0
63	...	Nov. 5	M	1	59	23.41	...	150	2	30.2	9.3
	... ..	Dec. 5	M		59	23.62	..		2	32.7	9.3
64	13 Arietis α .. .	Oct. 17	R	1	59	30.68	..	67	10	58.6	...
	... ..	Nov. 14	M		59	30.64	...		10	58.5	...
	... ..	" 22	R		59	30.70	...		10	58.3	...
	... ..	" 23	R		59	30.63	...		10	58.5	...
	... ..	" 24	R		59	30.65	...		10	57.7	...
	... ..	Dec. 6	M		59	30.72	...		10	58.0	...
	... ..	" 10	M		59	30.67	...		10	58.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
65	697 Taylor ...	Jan. 4	M	2	1	45.88	..	145	43	57.4	6.7
66	... ..	Oct. 22	R	2	1	54.96	...	130	2	27.4	9.3
	... ..	" 26	R		1	55.02	...		2	29.2	9.3
67	677 Lacaille ...	Oct. 24	R	2	6	55.77	...	149	47	35.4	8.0
68	... ..	Oct. 26	R	2	6	58.76	...	148	39	29.4	9.7
69	754 Taylor ...	Jan. 4	M	2	9	11.61	...	147	58	52.3	8.8
	... ..	Nov. 29	R		9	11.89	5		58	55.1	9.0
70	67 Ceti ...	Nov. 11	M	2	10	12.07	...	97	3	3.2	...
	... ..	" 23	R		10	12.05	...		3	3.3	...
	... ..	" 24	R		10	12.12	...		3	2.5	...
	... ..	" 25	R		10	12.00	..		3	1.4	...
	... ..	Dec. 5	M		10	12.03	...		3	3.4	...
	... ..	" 9	M		10	12.04	..		3	3.5	...
	... ..	" 20	R		10	12.07	...		3	2.2	...
71	68 Ceti o Var. 1 (Mira).	Jan. 6	M	2	12	28.65	...	53	35	54.9	6.5
	... ..	Oct. 22	R		12	28.67	...		35	51.5	8.2
	... ..	" 24	R		12	28.71	...		35	50.2	8.0
72	... ..	Dec. 6	M	2	16	23.72	..	151	18	24.7	8.0
73	818 Taylor ...	Jan. 4	M	2	19	8.13	...	147	25	59.7	7.5
74	.. ..	Jan. 7	M	2	20	10.55	4	145	32	42.3	...
	.. ..	Nov. 29	R		20	10.81	...		32	44.0	...
75	73 Ceti 1' ..	Jan. 5	M	2	20	55.85	...	82	9	5.3	...
	... ..	" 6	M		20	55.79	...		9	4.9	...
	... ..	Nov. 14	M		20	55.91	...		9	6.3	...
	... ..	" 22	R		20	55.80	4		9	6.0	...
	... ..	" 25	R		20	55.83	..		9	5.2	...
	... ..	Dec. 9	M		20	55.80	...		9	5.6	...
	... ..	" 10	M		20	55.89	...		9	5.0	...
	... ..	" 17	R		20	55.77	...		9	5.7	...
	... ..	" 20	R		20	55.81	..		9	4.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
76	α Horologii	Dec. 5	M	2	21	6.12	...	150	55	20.0	6.0
77	"	Dec. 13	M	2	24	27.04	..	147	2	45.3	8.3
78	783 Lacaille ...	Jan. 11	M	2	26	12.97	...	148	24	54.3	7.8
	"	Nov. 11	M		26	13.41	5		24	55.7	7.0
79	"	Nov. 29	R	2	29	10.04	5	147	37	20.6	9.5
80	31 Arietis ..	Dec. 9	M	2	29	12.91	..	78	8	40.2	
	"	" 10	M		29	12.97	5		8	39.8	5.5
81	"	Jan. 4	M	2	30	45.22	..	147	34	54.3	9.8
	"	Nov. 24	R		30	45.57	..		34	54.6	9.7
82	"	Dec. 5	M	2	31	15.88	6	151	39	24.0	9.6
83	11 556 W. B. N.	Nov. 23	R	2	33	10.17	...	74	53	50.0	8.5
	"	" 29	R		33	10.25	5		54	0.0	9.0
84	"	Nov. 10	M	2	33	59.16	...	74	56	35.3	8.7
85	849 Lacaille (1st)	Jan. 5	M	2	36	0.53	..	150	9	10.0	7.0
86	86 Ceti γ	Jan. 7	M	2	36	15.50	.	87	20	22.1	..
	"	" 11	M		36	15.49	.		20	22.6	.
	"	Nov. 8	M		36	15.30	.		20	22.1	.
	"	" 14	M		36	15.33	.		20	22.6	.
	"	" 25	R		36	15.31	.		20	22.3	.
	"	Dec. 12	M		36	15.22	..		20	22.7	.
	"	" 13	M		36	15.31	..		20	22.9	..
	"	" 17	R		36	15.36	..		20	23.6	..
87	35 Arietis	Oct. 15	M	2	37	33.08		78	7	44.1	5.1
	"	Dec. 9	M		37	32.39			7	44.6	..
	"	" 10	M		37	33.17	...		7	43.2	5.0
88	11 676 W. B. N.	Nov. 4	M	2	40	8.21	..	75	20	24.7	7.9
	"	" 23	R		40	9.17	5		20	24.9	8.0
	"	Dec. 23	R		40	8.08			20	23.8	8.3

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
89	42 Arietis w ...	Jan. 6	M	2	41	42.75	...	73	6	14.3	5.2
	... ..	Oct. 15	M		41	42.41	4		6	17.1	5.6
90	.. ..	Jan. 4	M	2	43	17.76	4	148	0	37.3	8.7
	.. ..	" 15	M		43	18.04	5		0	37.0	8.9
91	II 733 W. B. E. ...	Nov. 23	R	2	43	19.18	5	76	2	13.3	9.5
	... ..	" 24	R		43	19.12	...		2	12.7	9.5
92	.. ..	Jan. 12	M	2	45	15.73	3	76	27	53.8	9.2
93	969 Taylor ..	Nov. 10	M	2	45	37.51	...	74	4	28.1	7.4
	... ..	Dec. 2	M		45	37.46	...		4	28.4	7.5
94	87 Rumker ...	Dec. 5	M	2	46	0.94	5	153	22	19.5	5.9
95	5380 Lalande ...	Nov. 23	R	2	47	42.04	...	74	14	41.8	8.0
	... ..	" 24	R		47	42.00	...		14	41.0	8.2
96	941 Lacaille ...	Jan. 7	M	2	50	26.42	5	146	26	7.4	6.3
	... ..	" 11	M		50	26.47	5		26	6.0	6.7
97	... ..	Jan. 5	M	2	52	21.64	...	150	17	8.5	8.6
98	... ..	Dec. 13	M	2	53	15.55	4	146	44	28.5	8.4
99	969 Lacaille ...	Jan. 15	M	2	54	53.50	...	144	13	57.3	7.9
100	92 Ceti a ...	Jan. 7	M	2	55	10.37	...	56	26	46.3	..
	... ..	Nov. 21	R		55	10.32	...		26	47.0	..
	... ..	" 23	R		55	10.38	...		26	46.8	..
	... ..	Dec. 7	M		55	10.17	...		26	46.2	..
	... ..	" 9	M		55	10.33	...		26	46.3	..
	... ..	" 12	M		55	10.35	...		26	46.6	..
	... ..	" 23	R		55	10.29	...		26	47.0	..
101	p Persei Var. 2 ..	Jan. 6	M	2	56	27.54	4	51	41	23.1	..
102	1037 Taylor ..	Jan. 11	M	2	56	53.97	5	150	21	35.5	9.3
	... ..	" 12	M		56	54.23	...		31	33.8	9.1

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude
				h.	m.	s.		°	'	"	
103	β Persei Var. 1	Nov. 4	M	2	59	20.60	5	49	34	17.7	...
	..	" 29	R		59	20.41	...		34	17.0	...
104	1047 Taylor	Jan. 18	M	2	59	51.39	5	151	19	52.9	6.8
	..	Dec. 23	R		59	51.61	3		10	53.5	7.8
105	1052 Taylor	Jan. 16	M	3	0	25.00	5	150	16	1.7	6.0
106	23 R. P. 1. s.p.	June. 4	R	3	0	42.11	5	5	34	52.8	...
107	57 Arietis 3	Nov. 21	R	3	3	51.30	...	70	47	25.0	...
	..	" 23	R		3	51.33	5		47	26.3	...
	..	" 29	R		3	51.32	4		47	26.3	...
	..	" 30	R		3	51.35	...		47	26.5	...
	..	Dec. 5	M		3	51.35	...		47	25.2	...
	..	" 7	M		3	51.45	...		47	26.8	...
	..	" 10	M		3	51.35	...		47	25.9	...
	..	" 12	M		3	51.35	...		47	26.5	...
	..	" 21	R		3	51.26	...		47	25.9	...
108	1007 Lacaille	Jan. 19	M	3	4	48.78	...	152	14	28.7	7.0
109	1092 Taylor	Jan. 11	M	3	7	15.46	...	148	19	28.9	7.1
	..	" 15	M		7	15.63	...		19	28.1	6.7
	..	Dec. 6	M		7	15.60	6		19	31.1	7.0
110	..	Dec. 13	M	3	7	16.15	3	145	49	32.5	9.0
111	..	Jan. 12	M	3	12	41.14	5	130	50	15.6	8.6
112	33 Persei a	Nov. 24	R	3	14	37.52	...	40	37	34.4	...
	..	" 25	R		14	37.61	...		37	35.3	...
	..	Dec. 16	R		14	37.59	...		37	33.8	...
113	..	Jan. 16	M	3	14	51.02	5	150	6	18.7	9.0
114	3 ^d Reticuli	Jan. 19	M	3	15	15.79	5	153	1	37.7	5.9
	..	" 28	R		15	15.62	4		1	38.2	6.3
115	..	Jan. 5	M	3	20	18.17	...	149	18	56.3	7.8

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
116	... ..	Jan. 15	M	3	20	34.44	5	149	28	28.7	7.3
	... ..	" 18	M		20	34.25	...		28	30.8	7.4
117	... ..	Jan. 7	M	3	22	0.03		88	12	26.3	7.5
118	34 R. P. L. ...	Jan. 4	M	3	22	14.89	3	3	47	26.9	
	... ..	Nov. 22	R		22	16.53	3		47	25.1	
	... ..	Dec. 20	R		22	17.31	3		47	29.5	
119	1143 Lacaille ...	Jan. 19	M	3	27	0.48	5	153	25	6.9	5.7
	" ..	" 21	M		27	0.86	3		25	6.0	
120	1150 Lacaille ...	Dec. 14	M	3	28	26.56	3	152	28	17.6	7.7
121	1159 Lacaille ..	Jan. 20	M	3	30	16.54	...	151	25	33.8	6.7
	... ..	" 28	R		30	16.11	..		25	31.9	7.0
122	1192 Lacaille ...	Jan. 11	M	3	34	58.48	...	147	43	46.9	8.5
123	1193 Lacaille ...	Jan. 5	M	3	35	15.49	...	146	35	14.0	8.1
124	1200 Lacaille ...	Jan. 7	M	3	36	24.51	...	146	40	31.5	
	... ..	" 28	R		36	24.26	5		40	30.2	6.9
125	17 Tauri (<i>Electra</i>) ...	Jan. 6	M	3	37	45.28	...	60	18	50.2	
126	25 Tauri γ (<i>Aleyone</i>).	Jan. 18	M	3	39	24.24	.	60	19	7.2	
	... ..	" 19	M		39	24.26	.		19	7.9	
	... ..	Oct. 17	R		39	24.25			19	8.0	
	... ..	Nov. 16	R		39	24.27	...		19	7.3	
	... ..	" 21	R		39	24.17			19	7.4	
	... ..	" 30	R		39	24.22	.		19	7.7	
	... ..	Dec. 10	M		39	24.27			19	7.1	
	... ..	" 16	R		39	24.26	...		19	7.4	
	... ..	" 21	R		39	24.23			19	6.0	
	... ..	" 22	R		39	24.17			19	7.6	
	... ..	" 23	R		39	24.09			19	6.9	
127	β Reticuli ...	Jan. 20	M	3	42	30.23		156	14	9.2	5.7
	... ..	" 27	R		42	30.06	5		14	7.5	5.3

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
128		Nov. 24	R	3	46	11.82	...	76	27	48.7	9.0
129		Jan. 5	M	3	46	32.44	...	146	33	38.2	8.8
		" 11	M		46	32.32	...		33	39.9	8.7
130		Jan. 7	M	3	48	3.85	5	150	50	17.3	8.0
		" 12	M		48	3.62	...		50	15.8	8.6
131	34 Eridani γ^1	Jan. 6	M	3	51	41.11	...	103	53	52.9	...
		" 15	M		51	41.11	...		53	52.0	...
		Nov. 16	R		51	41.07	...		53	52.4	...
		" 21	R		51	41.13	...		53	52.6	...
		" 30	R		51	41.07	5		53	52.7	...
		Dec. 21	R		51	41.18	5		53	52.0	...
		" 22	R		51	41.11	...		53	52.4	...
		" 23	R		51	41.18	5		53	53.0	...
132	λ Tauri Var. 1	Jan. 29	R	3	53	8.92	...	77	53	48.7	6.3
133		Jan. 5	M	3	53	40.29	5	143	8	23.6	7.9
134	1327 Lacaille	Jan. 22	M	3	54	18.60	...	153	51	27.3	5.8
		" 23	M		54	18.90	3		51	24.3	6.0
		Dec. 2	M		54	18.66	...		51	29.6	6.0
135	36 Tauri	Dec. 5	M	3	56	13.88	...	66	16	18.6	6.5
		" 6	M		56	13.77	...		16	19.0	6.5
		" 7	M		56	13.63	5		16	18.5	6.5
		" 8	M		56	13.63	4		16	19.1	6.5
		" 9	M		56	13.71	1		16	18.9	6.5
		" 10	M		56	13.72	4		16	18.2	6.5
		" 12	M		56	13.92	...		16	19.5	...
		" 13	M		56	14.01	3		16	19.4	...
		" 14	M		56	13.81	...		16	18.6	6.5
		" 16	R		56	13.92	4		16	19.3	...
136	37 Tauri A ¹	Oct. 17	R	3	56	39.51	...	68	17	36.3	...
137	1347 Lacaille	Jan. 11	M	3	58	6.08	...	149	2	35.3	7.9
		" 16	M		58	6.81	...		2	34.3	7.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
138	1359 Lacaille	Jan. 7	M	4	0	0.83	...	147	50	5.9	8.7
	"	" 27	R		0	0.59	...		50	2.4	9.7
139	1375 Lacaille	Jan. 15	M	4	2	54.42	...	148	50	46.0	8.0
	"	" 28	R		2	54.31	...		50	45.5	9.0
140	"	Jan. 30	R	4	3	23.60	5	68	30	15.3	9.8
141	37 Eridani	Jan. 5	M	4	3	41.58	...	97	16	55.3	5.6
142	"	Jan. 6	M	4	5	0.07	...	150	5	33.3	8.7
	"	" 12	M		5	0.27	5		5	31.8	8.8
143	38 Eridani α^1	Jan. 27	R	4	5	13.64	...	97	11	41.0	...
	"	" 29	R		5	13.72	...		11	40.0	...
	"	Nov. 16	R		5	13.59	5		11	42.2	...
144	"	Jan. 16	M	4	9	18.82	...	149	31	9.8	8.3
	"	" 20	M		9	18.58	5		31	9.8	8.6
145	"	Nov. 22	R	4	9	46.60	...	129	18	57.0	8.0
146	1489 Taylor	Jan. 7	M	4	11	2.58	...	148	22	0.7	6.9
	"	" 11	M		11	2.73	...		21	59.7	7.3
147	1425 Lacaille	Jan. 21	M	4	13	1.45	...	152	32	4.7	5.9
	"	" 27	R		13	1.17	...		32	1.2	6.5
148	U Tauri Var. 7	Nov. 24	R	4	13	53.65	...	70	30	42.4	9.7
149	T Tauri Var. 6	Jan. 28	R	4	14	3.74	4	70	47	24.0	10.5
	"	" 30	R		14	3.94	...		47	27.1	10.2
150	ϵ Reticuli	Jan. 12	M	4	14	8.76	...	149	37	48.1	5.0
	"	" 15	M		14	8.73	5		37	48.3	5.0
151	1613 Taylor	Feb. 3	M	4	14	18.37	5	151	17	2.3	6.8
	"	Nov. 23	R		14	18.14	3		17	3.0	6.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
152	61 Tauri β^1	Jan. 18	M	4	15	5.64	...	72	46	48.2	...
		" 19	M		15	5.61	...		46	47.9	...
		Oct. 17	R		15	5.58	...		46	48.7	...
153	62 Tauri	Dec. 21	R	4	15	47.95	...	66	1	12.1	...
		" 22	R		15	47.84	...		1	10.0	...
154		Jan. 6	M	4	16	45.55	...	140	4	26.5	8.8
155	69 Tauri γ^1	Dec. 1	M	4	18	10.43	...	67	29	55.7	...
		" 2	M		18	10.42	...		29	56.6	...
		" 12	M		18	10.30	...		29	56.3	...
		" 14	M		18	10.28	...		29	55.1	...
		" 15	R		18	10.47	...		29	54.8	...
		" 16	R		18	10.38	...		29	54.7	...
		" 17	R		18	10.36	...		29	55.1	...
156	74 Tauri ϵ	Jan. 5	M	4	20	40.64	5	71	7	28.9	...
		" 7	M		20	40.60	...		7	29.0	...
		" 11	M		20	40.70	...		7	28.7	...
		" 12	M		20	40.79	...		7	29.1	...
		" 15	M		20	40.80	...		7	29.3	...
		" 16	M		20	40.63	...		7	28.2	...
		" 18	M		20	40.71	...		7	30.3	...
		" 19	M		20	40.66	...		7	29.3	...
		Oct. 17	R		20	40.69	...		7	31.0	...
		Dec. 13	M		20	40.80	...		7	30.0	...
		" 16	R		20	40.70	...		7	29.6	...
		" 22	R		20	40.66	...		7	29.1	...
		" 23	R		20	40.63	...		7	29.5	...
157	R Tauri Var. 2	Jan. 29	R	4	20	51.25	4	50	8	38.1	10.0
		Feb. 1	R		20	50.89	4		8	37.2	9.7
158		Jan. 30	R	4	22	21.53	5	50	21	15.0	10.3
		Nov. 24	R		22	21.81	...		21	14.4	10.0
159	1592 Taylor	Jan. 21	M	4	23	12.66	5	151	32	49.3	6.0

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				h.	m.	s.		°	'	"	
168	95 Tanri	Nov. 23	R	4	35	0-01	3	66	10	22-0	6-5
169	1567 Lacaille	Jan. 22	M	4	35	11-25	...	152	20	46-8	5-6
	... ..	" 23	M		35	11-05	...		20	46-4	5-7
	... ..	Feb. 3	M		35	11-20	2		20	47-8	6-2
170	1566 Lacaille	Jan. 6	M	4	35	46-00	...	148	28	26-3	7-8
171	1663 Taylor	Jan. 15	M	4	36	50-08	...	138	48	8-3	7-0
172	1582 Lacaille	Jan. 20	M	4	37	18-87	5	152	38	44-3	7-7
	... ..	" 28	R		37	18-35	...		38	42-5	9-2
173	... ..	Jan. 16	M	4	40	10-36	...	151	20	52-4	8-7
	... ..	" 27	R		40	10-09	5		20	52-7	9-8
174	α Doradus	Jan. 7	M	4	42	18-41	3	149	59	1-5	6-0
	... ..	" 11	M		42	18-49	...		58	59-0	6-5
	... ..	Feb. 9	M		42	18-40	...		59	0-3	6-5
175	1620 Lacaille	Jan. 21	M	4	43	42-96	5	153	28	32-3	6-0
	... ..	Feb. 4	R		43	42-96	...		28	33-0	7-0
176	1V 995 W. B. N.	Nov. 24	R	4	45	6-60	...	66	3	10-3	8-2
	... ..	Dec. 1	M		45	6-66	...		3	10-5	8-0
	... ..	" 2	M		45	6-55	...		3	10-3	8-0
	... ..	" 7	M		45	6-50	...		3	9-7	8-0
	... ..	" 8	M		45	6-51	...		3	9-3	8-0
	... ..	" 9	M		45	6-47	...		3	10-3	7-9
	... ..	" 10	M		45	6-54	4		3	9-1	8-0
	... ..	" 14	M		45	6-65	5		3	9-2	8-0
	... ..	" 22	R		45	6-57	...		3	9-5	...
177	... ..	Feb. 10	M	4	45	55-56	...	153	4	2-2	8-9
178	1V 1018 W. B. N.	Nov. 23	R	4	45	58-58	...	66	13	39-8	...
		" 25	R		45	58-06	...		13	39-2	...
		" 29	R		45	58-60	...		13	39-7	...
		Dec. 6	M		45	58-58	4		13	38-1	8-0

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				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
178	1V 1018 W. B. X. ...	Dec. 13	M	4	45	58.65	...	66	13	39.9	8.0
		" 15	R		45	58.71	...		13	39.5	8.5
		" 17	R		45	58.65	5		13	39.4	8.2
	... ..	" 20	R		45	58.67	5		13	39.2	...
	... ..	" 21	R		45	58.62	...		13	39.8	8.3
179	1656 Lacaille ...	Jan. 15	M	4	47	55.23	...	149	1	50.9	7.9
	... ..	" 20	M		47	55.98	5		2	1.7	7.6
	... ..	" 21	M		47	55.92	3		2	1.8	7.9
180	3 Aurigæ ...	Jan. 6	M	4	48	8.42	...	57	3	12.5	...
	... ..	" 12	M		48	8.34	...		3	11.9	...
	... ..	" 22	M		48	8.40	...		3	12.3	...
	... ..	" 23	M		48	8.43	...		3	11.7	...
	... ..	" 28	R		48	8.45	...		3	10.6	...
	... ..	Feb. 6	R		48	8.48	...		3	11.1	...
	... ..	" 8	R		48	8.55	...		3	10.8	...
	... ..	" 12	M		48	8.41	...		3	11.9	...
181	99 Tauri ...	Nov. 16	R	4	49	33.66	...	66	16	3.3	...
	... ..	" 21	R		49	33.63	6		16	3.8	...
	... ..	" 22	R		49	33.62	6		16	2.4	...
	... ..	" 23	R		49	33.75	5		16	4.4	...
	... ..	" 25	R		49	33.77	4		16	3.5	...
	... ..	" 29	R		49	33.68	...		16	3.7	...
182	1761 Taylor ...	Jan. 11	M	4	49	59.57	...	129	18	35.7	7.1
183	1780 Taylor ...	Jan. 7	M	4	52	15.36	...	144	28	42.0	7.5
184	... ..	Jan. 5	M	4	52	18.70	...	129	30	52.1	9.0
185	... ..	Dec. 14	M	4	52	40.71	...	150	37	52.6	9.1
186	1797 Taylor ...	Jan. 13	M	4	54	51.54	...	148	16	56.6	6.8
		" 16	M		54	51.26	...		16	58.5	6.7
187	102 Tauri ...	Feb. 10	M	4	54	58.24	5	68	36	28.0	5.0
		" 16	R		54	58.12	...		36	2.3	...

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				h.	m.	s.		°	'	"	
188	1097 Lacaille ...	Feb. 2	R	4	56	51.21	5	129	7	11.5	8.7
189	1811 Taylor ...	Jan. 18	M	4	57	2.80	...	129	55	3.5	6.0
190	1705 Lacaille ...	Jan. 20	M	4	57	25.62	...	129	16	33.4	7.7
	... ..	" 29	R		57	25.51	...		16	32.2	...
	... ..	Dec. 17	R		57	25.70	...		16	34.7	8.0
191	104 Tauri m ...	Feb. 16	R	4	59	24.97	5	71	32	28.0	...
192	2 Leporis e ...	Jan. 19	M	4	59	42.18	...	112	33	23.7	...
	... ..	" 27	R		59	42.23	...		33	21.5	...
	... ..	" 28	R		59	42.10	...		33	21.5	...
	... ..	Feb. 11	M		59	42.31	...		33	23.0	...
	... ..	" 12	M		59	42.18	...		33	22.1	...
193	103 Tauri ...	Nov. 16	R	4	59	49.43	...	65	55	7.3	...
	... ..	" 21	R		59	49.38	...		55	6.4	...
	... ..	" 23	R		59	49.43	3		55	7.5	...
	... ..	" 25	R		59	49.45	...		55	6.9	...
194	1739 Lacaille ...	Jan. 7	M	5	2	51.42	...	146	57	53.9	8.4
	... ..	Dec. 22	R		2	51.39	...		57	53.5	8.7
195	13 Aurigæ a (Capella)	Jan. 23	M	5	6	38.62	...	44	8	40.5	...
	... ..	" 29	R		6	38.67	...		8	40.0	...
196	19 Orionis ß (Rigel).	Jan. 18	M	5	7	50.08	...	98	21	43.2	...
	... ..	" 20	M		8	0.13	...		21	43.3	...
	... ..	" 21	M		8	0.20	...		21	42.7	...
	... ..	" 27	R		8	0.13	...		21	41.6	...
	... ..	" 28	R		8	0.13	...		21	42.5	...
	... ..	Feb. 13	M		8	0.16	...		21	41.1	...
	... ..	Dec. 14	M		8	0.22	...		21	42.5	...
197	... ..	Jan. 15	M	5	8	29.40	...	150	36	21.0	9.2
	... ..	Feb. 3	M		8	29.43	3		36	20.6	9.0
198	... ..	Nov. 24	R	5	10	55.76	...	129	48	31.6	9.5
	... ..	Dec. 23	R		10	55.46	4		48	31.8	9.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
199	... ..	Jan. 19	M	6	13	25.23	5	153	41	45.5	7.0
	... ..	" 29	R		13	25.15	...		41	42.6	...
200	... ..	Feb. 15	M	5	14	50.32	5	123	29	22.4	8.0
201	... ..	Jan. 20	M	5	17	37.62	5	153	7	21.9	8.2
	... ..	Feb. 2	R		17	37.76	...		7	18.0	8.5
202	112 Tauri β ...	Jan. 16	M	5	17	41.80	...	61	30	41.5	...
	... ..	Feb. 12	M		17	41.83	..		30	41.5	...
	... ..	Dec. 14	M		17	41.76	...		30	42.0	...
203	40 R. P. L. ... <i>s.p.</i>	June 16	R	5	18	45.12	3	4	53	3.4	...
204	1984 Taylor ...	Jan. 21	M	5	18	51.39	5	150	54	50.3	7.9
	... ..	Feb. 4	R		18	51.29	4		54	50.7	7.3
205	... ..	Feb. 3	M	5	19	4.78	...	148	14	18.4	9.0
206	... ..	Jan. 18	M	5	19	45.66	...	131	3	51.0	9.3
207	... ..	Jan. 27	R	5	21	42.30	5	59	41	0.6	10.0
	... ..	" 30	R		21	42.49	3		41	0.3	10.3
208	... ..	Jan. 22	M	5	22	35.24	...	152	42	6.4	6.5
	... ..	Feb. 15	M		22	35.26	4		42	6.1	6.2
209	λ Doradus ...	Jan. 15	M	5	24	20.65	3	140	1	42.6	6.1
	... ..	Dec. 9	M		24	20.45	...		1	44.0	6.0
210	34 Orionis δ ...	Jan. 23	M	5	25	3.49	...	90	24	10.1	...
	... ..	" 29	R		25	3.61	...		24	10.9	...
	... ..	Feb. 2	R		25	3.63	...		24	8.4	...
211	11 Leporis ϵ ...	Feb. 4	R	5	26	41.07	...	107	55	19.4	...
	... ..	Dec. 21	R		26	43.96	...		55	21.0	...
212	46 Orionis ϵ ...	Jan. 29	R	5	29	18.84	...	91	17	22.2	...
	... ..	Feb. 2	R		29	18.83	...		17	28.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
212	46 Orionis ϵ ...	Feb. 3	M	5	29	18.91	...	91	17	31.4	...
	... ..	" 8	R		29	18.87	...		17	31.2	...
	... ..	" 16	R		29	18.70	...		17	32.5	...
213	123 Tauri ζ ..	Jan. 19	M	5	29	30.98	...	68	56	40.3	...
	... ..	" 20	M		29	31.34	...		56	40.0	...
	... ..	Dec. 12	M		29	30.94	...		56	39.9	...
	... ..	" 13	M		29	31.23	...		56	40.0	...
214	... ..	Jan. 15	M	5	30	59.54	3	150	13	1.6	7.0
	... ..	Dec. 17	R		30	59.34	4		13	4.1	...
215	1949 Lacaille	Jan. 22	M	5	32	15.80	...	164	19	4.4	6.2
216	... ..	Jan. 7	M	5	32	42.28	6	150	11	35.1	8.9
	... ..	Feb. 16	M		32	42.66	5		11	34.6	8.3
	... ..	Dec. 17	R		32	42.42	4		11	36.4	...
217	α Columbae ...	Feb. 1	R	5	34	43.58	...	124	8	55.4	...
	... ..	" 2	R		34	43.53	...		8	52.6	...
	... ..	" 3	R		34	43.53	3		8	55.2	...
	... ..	" 4	R		34	43.54	...		8	55.1	...
	... ..	" 8	R		34	43.46	...		8	56.5	...
	... ..	Dec. 15	R		34	43.45	...		8	56.0	...
218	2113 Taylor ...	Jan. 5	M	5	35	8.22	...	130	45	35.4	8.5
219	1971 Lacaille	Jan. 11	M	5	36	21.37	...	140	11	31.9	7.0
	... ..	Feb. 9	M		36	21.57	...		11	31.7	7.1
220	... ..	Jan. 28	R	5	36	43.56	...	120	57	50.9	9.6
221	2184 Taylor ...	Feb. 11	M	5	43	54.43	4	150	46	23.9	8.8
	... ..	Dec. 23	R		43	54.56	3		46	25.2	9.3
222	... ..	Jan. 19	M	5	44	9.32	...	152	58	5.0	9.0
	... ..	Feb. 9	R		44	9.73	...		58	0.0	9.2
223	54 Orionis χ^1 ..	Dec. 12	M	5	46	19.65	...	60	45	11.2	...
	... ..	" 13	M		46	19.74	...		45	12.4	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
224	α Orionis Var. 1	Jan. 23	M	5	47	48.67	...	82	37	17.9	...
	...	Feb. 3	M		47	48.52	..		37	17.2	...
	...	Dec. 14	M		47	48.55	...		37	17.1	...
	...	" 15	R		47	48.64	...		37	18.4	...
225	...	Feb. 9	M	5	49	28.27	...	63	50	11.1	9.5
	...	Dec. 21	R		49	28.58	...		50	14.7	9.2
226	...	Feb. 2	R	5	40	36.53	5	130	1	18.6	9.7
227	43 R. P. L.	Aug. 11	M	5	52	0.00	3	3	14	22.0	...
228	...	Jan. 20	M	5	52	41.05	...	129	32	33.9	9.0
229	...	Dec. 22	R	5	53	1.65	.	130	24	59.2	8.8
230	64 Orionis χ^3	Feb. 16	R	5	55	24.35	..	70	18	40.6	...
	...	" 17	R		55	24.38	5		18	40.9	...
231	62 Orionis χ^4	Feb. 10	M	5	55	50.82	...	69	51	42.9	5.0
232	2301 Taylor	Feb. 3	M	5	58	29.56	3	148	6	17.9	6.5
233	2310 Taylor	Jan. 7	M	5	59	37.50	5	150	29	7.1	6.7
	...	" 12	M		59	37.55	...		29	6.5	6.9
234	67 Orionis ν	Feb. 1	R	5	59	48.52	...	75	13	7.6	...
	...	" 9	M		59	48.51	...		13	7.7	...
	...	" 11	M		59	48.42	...		13	7.7	...
	...	" 16	R		59	48.50	5		13	9.0	...
	...	" 17	R		59	48.41	..		13	8.0	...
	...	Dec. 15	R		59	48.41	.		13	8.1	...
235	...	Feb. 12	M	6	2	21.04	..	153	44	39.2	8.8
236	...	Feb. 10	M	6	8	35.05	5	155	3	29.5	9.8
	...	Dec. 23	R		8	35.01	...		3	31.5	9.2
237	...	Feb. 1	R	6	8	53.37	...	130	31	33.4	9.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				A.	m.	s.		°	'	"	
238	... ..	Mar. 2	M	6	10	6.15	...	153	14	23.0	9.6
239	... ..	Jan. 5	M	6	11	2.62	...	140	53	52.1	7.0
	... ..	Feb. 8	R		11	2.53	...		53	50.8	7.0
240	... ..	Feb. 12	M	6	11	42.86	6	152	1	49.0	...
	... ..	Mar. 1	M		11	43.21	5		1	49.0	8.8
241	13 Geminorum μ ...	Jan. 20	M	6	14	43.96	...	67	25	14.6	...
	... ..	" 21	M		14	43.96	...		25	15.0	...
	... ..	" 30	R		14	43.96	3		25	14.7	...
	... ..	Feb. 4	R		14	43.98	...		25	13.6	...
	... ..	" 9	M		14	43.94	...		25	14.8	...
	... ..	Dec. 13	M		14	44.02	...		25	14.8	...
	... ..	" 14	M		14	43.99	...		25	14.9	...
	... ..	" 15	R		14	44.03	...		25	14.1	...
242	2273 Lacaille ...	Mar. 3	M	6	17	3.52	...	153	58	26.4	7.0
	... ..	" 4	M		17	3.79	...		58	24.4	8.0
243	2286 Lacaille ...	Feb. 10	M	6	18	48.18	...	153	45	43.1	7.0
	... ..	Mar. 2	M		18	48.38	4		45	43.6	7.0
244	α Argus (Canopus) ...	Jan. 22	M	6	20	56.11	5	142	37	20.6	...
	... ..	" 27	R		20	55.92	...		37	18.9	...
	... ..	" 30	R		20	55.95	...		37	21.3	...
245	... ..	Feb. 8	R	6	22	6.43	...	128	48	41.2	8.5
	... ..	" 9	M		22	6.31	4		48	42.4	8.6
246	2312 Lacaille ...	Mar. 5	M	6	22	8.95	...	153	36	33.9	7.3
247	2524 Taylor ...	Feb. 1	R	6	23	27.42	...	131	3	3.0	7.2
248	2541 Taylor ...	Jan. 16	M	6	24	54.95	...	147	54	58.9	6.6
	... ..	Feb. 3	M		24	54.98	5		54	59.7	6.1
249	... ..	Feb. 10	M	6	27	30.41	...	152	27	51.9	9.0
	... ..	" 22	R		27	30.71	4		27	51.3	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude
				h.	m.	s.		°	'	"	
250	...	Feb. 1	R	6	27	45.69	5	131	5	17.8	9.0
	...	" 12	M		27	45.35	5		5	15.0	9.0
251	...	Feb. 8	R	6	28	24.17	...	130	55	46.3	8.9
	...	" 15	M		28	24.42	...		55	45.2	9.0
252	...	Mar. 1	M	6	28	39.37	3	151	10	16	8.6
	...	" 2	M		28	39.06	...		10	10	8.6
253	24 Geminorum γ	Jan. 20	M	6	29	51.28	...	73	29	18.6	...
	...	" 30	R		29	51.29	...		29	18.3	...
	...	Feb. 11	M		29	51.21	...		29	17.7	...
	...	" 16	R		29	51.25	...		29	18.2	...
	...	" 19	R		29	51.27	...		29	17.2	...
	...	Mar. 3	M		29	51.39	...		29	17.8	...
	...	" 4	M		29	51.32	...		29	19.3	...
	...	Dec. 13	M		29	51.01	2		29	17.3	...
	...	" 14	M		29	51.28	...		29	19.1	...
254	...	Mar. 10	M	6	33	33.10	5	152	27	3.5	8.5
255	...	Feb. 3	M	6	34	30.70	...	130	27	55.6	7.7
256	51 Cephei (Her.)	Jan. 11	M	6	35	39.20	3	2	45	18.7	...
	...	" 15	M		35	40.06	3		45	21.9	...
	...	" 19	M		35	39.37	3		45	19.8	...
	...	" 22	M		35	38.79	2		45	20.9	...
	...	" 28	R		35	39.19	3		45	19.6	...
	...	Feb. 9	M		35	38.55	3		45	20.2	...
	...	" 16	R		35	39.17	3		45	18.6	...
	...	" 19	R		35	38.18	3		45	17.4	...
	...	" 26	R		35	38.95	3		45	17.3	...
	...	Mar. 3	M		35	40.98	3		45	19.8	...
	...	" 5	M		35	39.41	3		45	17.6	...
	...	July 18	R		35	38.69	3		45	18.2	...
	...	Aug. 16	R		35	38.96	3		45	18.3	...
	...	" 23	R		35	38.27	3		45	22.0	...
	...	Dec 15	R		35	39.37	3		45	16.7	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
257	2653 Taylor	Feb. 10	M	6	30	32.86	...	151	24	50.1	7.0
		" 12	M		30	32.80	5		24	49.1	6.9
258	...	Mar. 8	M	6	37	53.06	...	163	20	37.4	9.3
259	2667 Taylor	Mar. 7	M	6	38	22.76	...	148	59	39.8	8.1
260	..	Mar. 4	M	6	39	7.42	3	131	3	28.0	8.6
261	9 Can. Maj. • (Sirius)	Jan. 26	R	6	39	9.31	..	106	31	57.2	.
	... ..	" 27	R		39	9.11	5		31	56.0	...
	... ..	Feb. 15	M		39	9.22	3		31	56.5	..
262	... ..	Feb. 22	R	6	40	29.42	...	151	2	27.0	8.6
	... ..	Mar. 9	M		40	29.47	...		2	27.2	8.3
	... ..	" 10	M		40	29.51	4		2	27.2	8.3
263	2724 Taylor ..	Mar. 11	M	6	44	53.27	3	144	36	2.0	8.6
	... ..	" 14	M		44	53.40	5		36	1.2	8.7
264	... ..	Feb. 18	R	6	46	32.75	5	130	10	6.9	9.5
	... ..	" 29	R		46	32.86	5		10	6.9	9.6
265	• Pictoris	Feb. 10	M	6	46	47.55	...	151	47	46.1	5.0
		" 11	M		46	47.61	..		47	46.1	5.0
266	2500 Lacaille	Jan. 20	M	6	46	59.78	...	130	23	21.3	8.0
		Mar. 10	M		47	0.31	..		23	19.8	7.7
267	2532 Lacaille	Mar. 7	M	6	48	12.77	5	150	5	32.2	6.9
		" 8	M		48	12.81	..		5	32.7	6.9
		" 9	M		48	13.02	4		5	32.7	6.7
268		Feb. 18	R	6	48	50.62	5	130	10	16.6	9.1
		" 29	R		48	50.49	6		10	17.3	9.4
269		Feb. 4	R	6	49	43.02	5	129	8	19.7	9.0
270		Jan. 27	R	6	50	20.04	3	75	17	23.4	10.7
		Feb. 1	R		50	25.72	4		17	20.4	10.6

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
271	21 Canis Majoris ϵ	Jan. 26	R	6	53	16.91	..	118	47	22.7	..
	" ..	" 30	R		53	16.91	..		47	20.9	..
	" ..	Feb. 3	M		53	16.88	3		47	21.8	..
	" ..	" 9	M		53	16.81	..		47	20.8	..
	" ..	" 10	M		53	16.82	..		47	21.2	..
	" ..	" 15	M		53	16.95	..		47	21.1	..
	" ..	Mar. 14	M		53	16.92	..		47	21.1	..
272	" ..	Jan. 29	R	6	53	47.61	..	120	47	30.1	9.3
	" ..	Mar. 10	M		53	47.83	5		47	31.6	8.8
	" ..	" 11	M		53	47.95	..		47	32.8	8.8
273	3 ^d Geminorum (1st).	Feb. 4	R	6	56	1.73	4	69	12	28.0	8.2
274	3 Geminorum Var. 1.	Jan. 21	M	6	56	2.66	..	69	14	2.0	..
	" ..	" 22	M		56	2.55	..		14	2.2	..
	" ..	Feb. 4	R		56	2.51	3		14	1.3	..
	" ..	" 17	R		56	2.33	..		14	2.4	..
	" ..	" 18	R		56	2.37	..		14	1.7	..
275	2825 Taylor ...	Feb. 11	M	6	56	51.97	..	150	54	38.0	8.7
	" ..	" 26	R		56	52.08	..		54	37.9	9.1
276	23 Canis Majoris γ	Jan. 30	R	6	57	36.32	..	105	26	5.7	..
	" ..	Feb. 16	R		57	36.31	..		26	6.0	..
	" ..	" 19	R		57	36.36	..		26	5.4	..
	" ..	" 22	R		57	36.25	..		26	4.5	..
277	" ..	Feb. 13	M	6	58	23.12	..	60	56	5.9	9.2
	" ..	Mar. 3	M		58	23.27	..		56	5.4	9.0
278	" ..	Mar. 8	M	6	59	11.80	..	60	59	54.9	9.0
279	" ..	Jan. 28	R	6	59	48.98	..	129	43	4.3	9.3
280	2851 Taylor	Mar. 9	M	7	0	49.82	..	145	44	48.1	7.5
	" ..	" 10	M		0	49.80	..		44	48.1	7.7
281	R Canis Min. Var. 1.	Jan. 29	R	7	1	13.77	5	79	45	50.6	9.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		"	"	"	
282	2682 Taylor ..	Jan. 18	M	7	3	26.87	..	151	1	4.5	8.8
	" ..	" 26	R		3	27.04	...		1	1.7	9.2
	" ..	Mar. 11	M		3	26.74	..		1	2.0	8.7
	" ..	" 14	M		3	26.96	..		1	2.7	8.8
283	" ..	Jan. 25	R	7	4	58.07	6	130	42	33.2	9.3
284	2699 Taylor	Feb. 2	R	7	5	47.67	..	130	8	40.2	8.9
285	" ..	Jan. 30	R	7	5	51.92	...	129	23	13.1	9.6
286	2678 Lacaille	Mar. 5	M	7	6	10.50	...	148	9	13.4	8.6
287	" ..	Jan. 27	R	7	6	38.61	...	129	2	41.9	8.2
288	" ..	Jan. 16	M	7	7	50.34	...	148	46	2.0	9.3
	" ..	Feb. 9	M		7	50.51	3		46	1.7	9.9
289	" ..	Feb. 11	M	7	8	9.14	...	152	5	1.5	8.9
	" ..	" 19	R		8	9.11	..		5	2.1	8.9
290	2940 Taylor	Jan. 29	R	7	9	27.96	5	129	57	41.1	9.0
291	54 Geminorum A	Feb. 17	R	7	10	16.53	..	73	13	3.4	
	" ..	" 19	R		10	16.44	5		13	3.6	..
	" ..	Mar. 17	R		10	16.37	..		13	3.8	..
292	" ..	Jan. 28	R	7	10	16.00	..	131	52	8.3	9.8
293	55 Geminorum B	Jan. 21	M	7	11	50.85	..	67	46	16.3	..
	" ..	" 22	M		11	50.94	..		46	15.6	..
	" ..	Feb. 1	R		11	50.91	..		46	15.0	..
	" ..	" 10	M		11	50.94	...		46	14.7	..
	" ..	" 13	M		11	50.92	..		46	16.4	..
	" ..	" 15	M		11	50.95	..		46	16.2	..
	" ..	Mar. 1	M		11	50.91	..		46	15.8	..
	" ..	" 2	M		11	50.94	..		46	15.2	..
	" ..	" 3	M		12	0.00	..		46	15.7	..
	" ..	" 4	M		11	50.95	..		46	15.6	..

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
294	..	Jan. 25	R	7	13	1.19	...	129	15	59.3	9.2
295	..	Jan. 26	R	7	14	30.70	5	139	49	35.4	8.7
296	3005 Taylor ..	Mar. 5	M	7	15	28.64	5	140	0	53.6	8.7
	...	" 14	M		15	28.96	...		0	54.9	8.6
297	2805 Lacaille ...	Mar. 7	M	7	17	21.21	..	153	8	4.0	8.3
298	.. ..	Feb. 2	R	7	18	4.08	...	129	42	31.1	9.2
299	3043 Taylor ..	Feb. 13	M	7	19	14.01	3	129	16	24.8	7.0
300	.. ..	Jan. 30	R	7	19	35.74	5	123	7	59.6	
301	63 Geminorum ...	Dec. 14	M	7	19	39.74	...	68	16	45.7	5.5
	... ..	" 15	R		19	39.87	5		16	45.9	
302	3054 Taylor ...	Feb. 11	M	7	20	1.94	...	151	41	25.7	7.0
	.. ..	Mar. 1	M		20	2.18	4		41	25.5	7.4
303	... ..	Feb. 4	R	7	21	34.23	5	131	50	25.7	7.7
304	6 Canis Minoris ..	Feb. 18	R	7	22	13.39	..	77	42	55.1	
305	.. .	Jan. 27	R	7	23	24.08	5	51	57	26.3	9.8
306	... ..	Mar. 3	M	7	24	58.41	4	123	8	19.2	9.0
307	8 Canis Minoris Var. 2.	Jan. 30	R	7	25	20.43	...	81	28	41.7	8.3
308	68 Geminorum ..	Feb. 18	R	7	25	50.58	..	73	53	2.0	
	.. ..	" 19	R		25	50.65	5		53	4.0	
	.. ..	Mar. 17	R		25	50.60	5		53	3.2	
	.. ..	Dec. 15	R		25	50.67	4		53	4.4	
309	60 Gem. α ¹ (Castor).	Feb. 15	M	7	25	55.07	..	57	49	2.8	
	.. ..	" 17	M		25	55.11			49	1.3	
	.. ..	" 26	R		25	55.01			49	1.3	

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
310	... ..	Jan. 16	M	7	26	5.18	...	142	5	53.7	8.9
311	... ..	Mar. 4	M	7	26	48.20	...	123	7	23.1	8.0
	... ..	" 5	M		26	48.21	...		7	21.6	9.0
	... ..	" 7	M		26	48.36	...		7	22.0	9.0
312	... ..	Mar. 8	M	7	27	13.25	...	153	10	42.2	9.3
313	3126 Taylor ...	Feb. 3	M	7	29	34.20	4	143	15	44.3	7.1
314	10 Can. Min. (Procyon).	Feb. 5	R	7	32	10.96	...	84	25	47.0	...
	... ..	" 17	R		32	10.84	...		25	46.7	...
	... ..	" 18	R		32	10.85	...		25	46.5	...
	... ..	" 26	R		32	10.86	...		25	45.9	...
	... ..	Mar. 2	M		32	10.84	...		25	45.8	...
	... ..	" 9	M		32	10.80	...		25	46.0	...
	... ..	" 10	M		32	10.87	...		25	46.3	...
315	2593 Lacaille ...	Feb. 13	M	7	32	43.53	...	121	40	29.0	8.0
	... ..	Mar. 11	M		32	43.28	...		40	27.1	7.0
316	2910 Lacaille ...	Feb. 22	R	7	33	17.38	6	143	52	51.3	7.7
317	... ..	Feb. 4	R	7	35	10.00	...	66	15	55.0	9.8
318	... ..	Mar. 7	M	7	35	19.80	3	152	50	34.8	8.0
319	... ..	Jan. 16	M	7	35	29.22	...	141	19	41.9	8.6
320	78 Gem. β (Pollux) ..	Feb. 5	R	7	36	59.34	...	61	38	56.2	...
	... ..	" 10	M		36	59.43	...		38	55.7	...
	... ..	" 18	R		36	59.38	...		38	55.7	...
	... ..	Mar. 1	M		36	59.40	...		38	56.6	...
	... ..	" 2	M		36	59.36	...		38	56.5	...
	... ..	" 5	M		36	59.63	5		38	55.8	...
321	2971 Lacaille ...	Feb. 12	M	7	40	18.18	...	143	54	58.7	7.5
	... ..	Mar. 10	M		40	18.36	...		54	57.8	7.6
322	T Geminae Var. 4.	Feb. 2	R	7	41	5.37	4	65	55	48.7	10.4

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>					
323	...	Mar. 8	M	7	41	18.45	5	151	34	30.1	8.5
324	...	Feb. 26	R	7	41	32.23	...	144	18	41.3	8.7
325	3013 Lacaille	Feb. 3	M	7	43	29.04	2	142	0	43.3	7.0
	...	Mar. 11	M		43	29.03	...		0	43.0	7.0
326	49 R. P. L.	Feb. 15	M	7	43	55.47	2	5	33	41.4	...
	...	Mar. 9	M		43	55.14	3		33	42.2	...
	...	Sept. 13	M		43	55.11	2		33	40.4	...
327	3034 Lacaille	Mar. 7	M	7	44	4.63	5	153	51	30.1	8.8
328	3031 Lacaille	Jan. 16	M	7	45	5.14	...	144	22	26.1	7.0
	...	Feb. 29	R		45	5.15	...		22	27.2	7.6
	...	Mar. 3	M		45	5.11	...		27	27.6	7.7
329	3200 Taylor	Jan. 25	R	7	46	18.00	4	144	27	57.2	8.3
330	1791 Brisbane	Jan. 25	R	7	46	18.63	3	144	24	39.2	8.3
331	...	Mar. 4	M	7	46	29.42	...	144	22	26.0	8.6
	...	" 5	M		46	29.47	3		22	27.1	8.6
332	...	Feb. 18	R	7	48	28.60	...	67	46	6.8	9.2
	...	Mar. 2	M		48	28.62	...		46	6.6	9.0
333	3310 Taylor	Mar. 14	M	7	48	32.61	...	149	17	32.9	7.0
334	...	Feb. 5	R	7	48	50.01	5	130	26	3.1	9.5
335	...	Mar. 8	M	7	49	29.50	5	152	34	55.6	6.9
336	...	Mar. 10	M	7	50	4.76	3	12	33	25.7	8.8
337	3339 Taylor	Feb. 12	M	7	51	50.10	...	144	16	56.4	8.6
338	...	Mar. 1	M	7	52	54.06	...	144	41	42.0	8.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension 1864.			No. of Wires.	Mean Polar Distance 1864			Magnitude.
				A.	m.	s.		"	"	"	
339	5 Cancri	Jan. 22	M	7	53	45.13	...	73	10	23.2	6.0
		" 23	M		53	45.31	...		10	21.0	6.0
340	6 Cancri	Jan. 26	R	7	55	9.63	...	61	49	39.8	...
		Feb. 2	R		55	9.78	...		49	39.9	...
		Mar. 9	M		55	9.68	...		49	40.8	...
		" 11	M		55	9.72	...		49	40.8	...
341	3373 Taylor	Feb. 23	R	7	55	13.83	5	141	11	51.0	6.0
		Mar. 3	M		55	13.78	...		11	53.1	7.8
342	"	Mar. 16	R	7	55	20.11	...	128	30	12.2	8.0
343	1955 Brisbane	Mar. 5	M	7	55	27.93	...	152	55	47.1	6.7
		" 7	M		55	28.21	3		55	47.2	7.0
344	3390 Taylor	Feb. 13	M	7	55	48.11	...	141	10	31.0	7.6
		" 22	R		55	47.58	4		10	33.0	8.0
		Mar. 4	M		55	47.90	6		10	34.4	7.9
345	"	Feb. 1	R	7	56	31.51	...	129	21	20.2	9.8
346	3154 Lacaille	Jan. 21	M	7	58	36.62	5	153	11	27.7	5.5
		Mar. 2	M		58	36.64	5		11	29.5	5.6
		" 15	M		58	36.93	5		11	28.9	5.7
347	12 Cancri	Jan. 22	M	8	1	6.38	...	75	57	59.2	6.0
		" 23	M		1	6.58	...		57	58.0	6.0
348	3174 Lacaille	Mar. 8	M	8	1	25.72	5	165	37	56.8	7.0
		Apr. 2	M		1	25.65	...		37	55.2	7.4
349	15 Argus	Jan. 25	R	8	1	45.10	...	113	54	51.6	...
		" 26	R		1	45.23	...		54	51.6	...
		Feb. 18	R		1	45.13	5		54	52.3	...
		" 22	R		1	45.15	...		54	51.5	...
		" 23	R		1	45.15	...		54	52.0	...
		" 26	R		1	45.20	...		54	51.2	...
		" 29	R		1	45.16	...		54	51.2	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
349	15 Argus	Mar. 7	M	8	1	46.08	...	113	54	51.7	...
	...	" 10	M		1	45.17	...	54	51.3		...
350	...	Feb. 12	M	8	2	2.82	4	113	46	47.6	9.1
351	3200 Lacaille	Mar. 4	M	8	4	47.56	5	153	7	25.0	6.9
	...	" 9	M		4	47.70	3		7	23.6	6.9
352	...	Feb. 4	R	8	5	19.41	4	130	45	22.9	8.6
353	...	Mar. 17	R	8	5	20.16	5	77	37	35.3	9.0
	...	" 31	R		5	20.03	3		37	34.3	10.3
354	...	Mar. 16	R	8	5	26.41	...	77	24	57.6	8.9
	...	" 22	R		5	26.36	4		24	57.8	8.9
	...	Apl. 6	M		5	26.52	...		24	57.0	9.2
355	...	Mar. 16	R	8	8	19.38	5	77	26	30.7	9.7
	...	Apl. 4	M		8	19.78	3		26	30.7	9.7
	...	" 5	M		8	19.78	4		26	31.8	9.8
356	R. Caneri Var. 1	Mar. 10	M	8	9	3.03	5	77	51	33.0	8.1
	...	" 14	M		9	3.61	...		51	33.0	7.9
357	...	Mar. 23	R	8	9	7.36	...	77	27	27.6	9.3
	...	Apl. 1	M		9	7.47	...		27	28.0	9.3
	...	" 2	M		9	7.51	4		27	28.1	9.0
358	...	Feb. 2	R	8	9	55.34	5	74	16	13.7	9.7
359	...	Mar. 17	R	8	10	28.71	5	77	37	47.9	9.7
	...	" 18	R		10	29.02	5		37	47.4	10.0
	...	" 31	R		10	28.80	5		37	47.5	9.9
360	16224 Lalande	Jan. 25	R	8	10	33.55	—	73	54	11.0	8.6
361	...	Feb. 5	R	8	12	17.13	4	128	43	28.1	8.8
362	...	Feb. 6	R	8	13	45.20	4	128	40	53.7	8.9

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		"	"	"	
363	... ..	Feb. 16	R	8	12	57.45	...	130	45	32.2	0.7
364	... ..	Feb. 17	R	8	13	20.72	5	131	41	14.0	0.5
		Mar. 7	M		13	20.54	3		41	13.6	8.8
365	... ..	Feb. 13	M	8	13	42.39	5	133	17	18.1	0.6
366	... ..	Mar. 8	M	8	14	30.56	...	154	5	5.7	0.7
367	... ..	Mar. 15	M	8	16	25.78	5	77	31	46.7	0.3
368	... ..	Mar. 11	M	8	17	22.71	...	77	49	9.1	8.6
369	... ..	Feb. 15	M	8	17	23.61	...	141	15	52.4	0.0
370	VIII 459 W. B. N. ...	Feb. 16	R	8	20	17.12	5	74	27	21.8	8.3
	... ..	" 17	R		20	17.06	...		27	21.4	0.0
	... ..	" 18	R		20	17.18	...		27	21.0	...
371	29 Cancri	Feb. 19	R	8	21	2.13	4	75	20	30.1	...
372	... ..	Mar. 10	M	8	23	7.87	...	73	25	21.8	0.0
		" 11	M		23	7.72	...		25	24.0	0.0
		" 14	M		23	7.85	...		25	24.3	0.0
373	3020 Taylor	Feb. 13	M	8	23	10.60	...	130	47	47.6	8.0
374	... ..	April 2	M	8	23	32.12	...	128	33	35.7	8.6
375	31 Cancri θ	Dec. 15	R	8	23	50.24	...	71	26	55.9	...
376	... ..	Mar. 1	M	8	24	44.93	...	73	45	40.9	0.6
		" 2	M		24	44.75	...		45	40.7	0.5
		" 3	M		24	44.77	...		45	40.7	0.5
		" 4	M		32	44.86	...		45	40.4	0.5
377	33 Cancri γ	Jan. 25	R	8	24	50.41	...	60	5	59.3	...
	... ..	Feb. 22	R		24	50.40	...		5	59.5	...
	... ..	" 23	R		24	50.41	...		5	59.3	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
377	33 Cancri η ...	Feb. 20	R	8	24	50.41	...	75	5	59.5	...
	... ..	Mar. 5	M		24	50.28	..		5	58.9	...
	... ..	" 7	M		24	50.47	...		5	59.7	...
	... ..	" 8	M		24	50.43	...		5	59.4	...
	... ..	" 9	M		24	50.45	...		5	59.7	...
	... ..	" 17	R		24	50.34	...		5	59.4	...
378	3651 Taylor ...	Feb. 5	R	8	25	39.62	3	103	3	20.0	7.8
379	3652 Taylor ...	Feb. 5	R	8	25	43.64	5	130	2	38.3	8.3
	... ..	Mar. 21	R		25	43.61	...		2	38.2	8.0
380	3393 Lacaille ...	Feb. 10	M	8	25	56.92	...	149	40	8.3	7.8
	... ..	" 15	M		25	56.92	...		40	8.9	7.9
381	... ..	Apl. 8	M	8	26	25.63	...	130	30	28.1	9.1
382	VIII 635 W. B. N. ...	Mar. 1	M	8	27	38.90	...	73	48	20.0	9.0
	... ..	" 2	M		27	38.97	...		48	19.2	9.0
	... ..	" 3	M		27	39.06	...		48	18.7	9.0
	... ..	" 4	M		27	38.78	...		48	19.8	9.0
383	U Cancri Var. 4 ...	Jan. 26	R	8	27	59.07	5	70	38	21.2	10.0
	... ..	Feb. 16	R		27	58.78	...		38	19.5	9.3
384	3672 Taylor ...	Feb. 17	R	8	28	29.88	...	74	13	7.4	7.0
	... ..	" 18	R		28	29.82	...		13	8.4	7.3
	... ..	" 19	R		28	30.16	...		13	7.6	...
385	16890 Lalande ...	Apl. 4	M	8	28	41.64	...	73	12	52.4	9.0
	... ..	" 5	M		28	41.65	...		12	52.7	8.8
	... ..	" 6	M		28	41.63	...		12	51.7	8.8
386	VIII 684 W. B. N. ...	Apl. 9	M	8	29	1.20	...	70	28	54.4	8.9
387	VIII 699 W. B. N. ...	Apl. 1	M	8	29	31.11	...	70	29	37.1	9.0
388	... ..	Feb. 20	R	8	31	12.43	...	129	45	24.0	9.4
389	3710 Taylor ...	Feb. 23	R	8	31	24.29	5	141	21	4.0	8.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		"	"	"	
390	... ..	Mar. 15	M	8	33	9.78	5	129	23	27.0	8.6
391	VIII 852 W. B. N. ..	Feb. 16	R	8	34	1.82	...	74	7	40.3	9.0
	... ..	" 17	R		34	1.80	5		7	39.7	9.0
	... ..	" 22	R		34	1.84	...		7	39.1	8.8
392	... ..	Feb. 29	R	8	34	39.45	5	129	46	12.0	9.2
	... ..	Mar. 7	M		34	39.32	...		46	12.1	8.0
	... ..	" 10	M		34	39.57	...		46	11.3	8.0
393	3491 Lacaille ..	Apl. 7	M	8	36	1.13	5	152	21	51.3	7.9
394	S. Cancri Var. 2 ..	Apl. 8	M	8	36	9.77	5	70	28	48.0	8.3
395	3767 Taylor	Mar. 9	M	8	36	19.67	3	149	50	15.2	7.6
396	47 Cancri δ	Dec. 15	R	8	36	57.18	...	71	20	55.9	...
397	... ..	Apl. 6	M	8	37	16.10	...	136	8	32.1	9.2
398	17231 Lalande ..	Feb. 18	R	8	37	41.09	...	74	27	41.3	8.3
	... ..	" 19	R		37	41.22	...		27	41.3	...
	... ..	" 22	R		37	41.10	...		27	41.3	7.5
399	... ..	Feb. 24	R	8	37	50.64	5	136	5	33.5	8.0
	... ..	Apl. 2	M		37	50.51	...		5	33.7	8.0
400	VIII 977 W. B. N.	Feb. 10	M	8	39	15.32	...	74	48	50.3	9.5
	... ..	" 15	M		39	15.20	...		49	1.7	9.0
	... ..	" 16	R		39	15.18	4		40	0.5	9.5
401	11 Hydre ε	Feb. 26	R	8	39	34.24	...	83	5	4.4	...
	... ..	" 29	R		39	34.29	...		5	4.6	...
	... ..	Mar. 5	M		39	34.16	...		5	3.6	...
	... ..	" 8	M		39	44.30	...		5	5.0	...
	... ..	" 14	M		39	34.20	...		5	4.7	...
	... ..	" 15	M		39	34.38	...		5	4.8	...
402	... ..	Feb. 23	R	8	40	29.34	...	129	15	34.0	8.3

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
403	VIII 1043 W. B. N. ...	Feb. 5	R	8	42	21.57	...	74	39	54.0	8.3
	... ..	" 11	M		42	21.50	...		39	55.1	8.3
	... ..	" 12	M		42	21.36	...		39	54.0	8.2
404	... ..	Apl. 4	M	8	45	46.94	...	86	27	12.0	8.7
	... ..	" 5	M		45	46.91	...		27	11.0	8.6
405	60 R. P. L. ...	Mar. 16	R	8	46	22.90	5	5	16	53.7	...
	... ..	" 19	R		46	23.67	3		16	53.7	...
	... ..	" 23	R		46	23.09	3		16	54.1	...
	... ..	Apl. 12	R		46	23.31	3		16	55.1	...
	 s.p.	Sept. 26	R		46	22.66	5		16	53.1	...
	 s.p.	" 29	R		46	22.63	3		16	53.5	...
406	S. Hydræ Var. 3 ...	Mar. 11	M	8	46	28.34	...	86	25	13.8	8.5
	... ..	Apl. 9	M		46	28.37	...		25	13.0	9.0
407	3886 Taylor ...	Feb. 13	M	8	48	13.86	...	136	52	52.5	7.9
	... ..	Mar. 10	M		48	14.05	...		52	52.8	7.9
	... ..	" 15	M		48	14.14	...		52	53.1	7.6
408	T. Hydræ Var. 4 ...	Mar. 22	R	8	49	2.70	5	98	37	29.1	10.0
	... ..	" 30	R		49	2.77	5		37	29.2	9.7
409	... ..	Mar. 9	M	8	49	13.13	3	132	54	19.8	7.7
410	... ..	Mar. 4	M	8	49	20.12	...	132	59	0.7	7.6
411	9 Ursæ Majoris ...	Feb. 22	R	8	49	52.89	...	41	25	37.0	...
	... ..	" 24	R		49	52.88	...		25	38.1	...
	... ..	" 26	R		49	52.81	...		25	38.4	...
	... ..	Mar. 5	M		49	52.77	6		25	37.2	...
412	... ..	Mar. 7	M	8	50	15.28	...	132	56	55.1	8.0
413	... ..	Feb. 17	R	8	50	46.62	5	98	44	16.8	9.8
414	VIII 1302 W. B. E. ...	Mar. 23	R	8	50	49.33	4	98	53	46.7	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>"</i>	<i>"</i>	<i>"</i>	
415	...	Feb. 16	R	8	50	58.88	5	98	35	0.3	9.1
	...	Mar. 17	R		50	58.75	5		35	0.2	9.2
416	65 Cancri α ...	Mar. 18	R	8	51	2.70	..	77	37	5.9	...
	...	" 19	R		51	2.70	5		37	6.2	...
417	...	Mar. 8	M	8	54	9.76	5	142	41	8.8	9.1
	...	" 16	R		54	9.80	...		41	9.8	9.5
418	...	Apl. 13	M	8	54	20.33	...	130	34	53.3	8.4
419	3941 Taylor ...	Feb. 5	R	8	54	59.75	5	144	6	23.4	5.5
420	...	Apl. 7	M	8	56	59.39	3	146	55	44.0	5.1
421	...	Feb. 26	R	8	56	43.30	...	129	18	12.4	9.5
422	...	Mar. 30	R	8	58	5.43	..	146	49	41.4	...
423	...	Apl. 9	M	8	58	9.40	..	146	19	23.9	9.0
424	...	Feb. 24	R	8	59	6.08	...	145	38	9.8	8.7
	...	Mar. 14	M		59	6.09	..		38	9.2	9.0
	...	Apl. 8	M		59	5.94	5		38	8.7	9.1
425	76 Cancri α ...	Jan. 23	M	9	0	22.92	...	78	47	13.2	...
	...	Mar. 18	R		0	22.60	...		47	12.4	...
	...	" 19	R		0	22.72	..		47	11.4	...
426	...	Mar. 9	M	9	1	3.47	3	150	1	31.3	8.3
	...	" 11	M		1	3.54	5		1	32.3	8.1
427	...	Mar. 17	R	9	1	50.14	...	128	57	10.7	8.0
428	3705 Lacaille ...	Apl. 14	M	9	2	13.97	3	151	17	3.1	7.1
	...	" 15	M		2	13.92	5		17	4.0	7.2
429	...	Feb. 29	R	9	2	15.75	2	71	26	28.1	10.5
430	...	Apl. 13	M	9	4	28.60	...	130	29	40.7	8.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.			Date of Observation.	Observer.	Mean Right Ascension.			No. of Wires	Mean Polar Distance.			Magnitude.
						h.	m.	s.		°	'	"	
431	3713 Lucille	..		Mar. 16	R	9	4	34.83	...	143	40	12.4	8.8
432	4021 Taylor	...		Feb. 24	R	9	5	31.07	5	138	44	10.7	7.0
	...	...		Mar. 15	M		5	31.21	5		44	12.2	7.1
433	...	...		Apl. 9	M	9	6	26.92	3	142	29	27.7	7.7
434	...	...		Feb. 24	R	9	6	30.83	4	138	41	30.2	8.8
435	...	...		Mar. 2	M	9	8	14.45	3	148	14	17.0	8.6
	...	...		" 3	M		8	14.11	3		14	13.7	8.5
	...	...		" 14	M		8	14.18	...		14	14.5	8.7
436	83 Cancri	...		Mar. 11	M	9	11	23.15	...	71	43	13.8	...
	...	...		" 17	R		11	23.10	...		43	13.8	...
	...	...		" 21	R		11	23.00	...		43	13.2	...
	...	...		Apl. 12	M		11	23.13	...		43	13.0	...
437	...	...		Feb. 17	R	9	11	48.62	...	130	45	8.5	8.6
	...	...		" 22	R		11	48.64	...		45	7.8	7.8
	...	...		Apl. 13	M		11	48.50	...		45	7.1	8.0
	...	...		" 14	M		11	48.63	...		45	8.0	8.2
438	...	...		Mar. 10	M	9	13	3.38	...	72	17	58.1	7.9
	...	...		" 18	R		13	3.11	..		17	57.0	...
	...	...		Apl. 5	M		13	3.30	..		17	57.4	7.9
439	Argas	...		Feb. 26	R	9	13	27.00		148	42	23.0	..
	...	...		Mar. 30	R		13	26.96	.		42	21.8	...
	...	...		Apl. 15	M		13	27.22	3		42	23.2	..
440	...	...		Apl. 1	M	9	14	37.05	5	24	50	29.1	8.6
	...	...		" 2	M		14	37.88	.		50	29.4	8.6
441	...	...		Mar. 23	R	9	15	15.46	5	143	48	40.2	9.0
442	...	...		Mar. 23	R	9	15	54.93	5	25	4	29.1	9.0
443	...	...		Mar. 1	M	9	16	6.17	4	140	7	34.8	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
444	9681 O. A. N. ...	Feb. 17	R	9	17	37.18	5	25	3	44.5	9.1
	... ..	Mar. 23	R		17	37.40	5		3	41.0	9.2
445	... ..	Feb. 23	R	9	19	29.04	...	75	6	30.3	7.7
	... ..	Mar. 2	M		19	29.11	...		6	31.8	7.6
446	30 Hydrae a Var. 1 ...	Mar. 4	M	9	20	54.17	...	98	4	15.8	...
	... ..	" 7	M		20	54.16	...		4	15.9	...
	... ..	" 14	M		20	54.23	...		4	15.8	...
	... ..	" 15	M		20	54.17	...		4	15.0	...
	... ..	" 16	R		20	54.26	...		4	15.4	...
	... ..	Apl. 15	M		20	54.28	...		4	14.0	...
447	3853 Lacaille ...	Mar. 3	M	9	22	31.06	...	131	59	15.6	7.9
	... ..	" 22	R		22	32.10	...		59	14.0	8.6
	... ..	Apl. 14	M		22	31.99	...		59	16.8	7.8
448	25 Ursae Majoris θ ...	Feb. 24	R	9	23	44.63	...	37	42	19.0	...
	... ..	Mar. 17	R		23	44.48	...		42	18.8	...
449	3986 Lacaille ..	Mar. 19	R	9	24	43.28	...	141	40	48.5	7.8
450	3887 Lacaille ..	Mar. 21	R	9	24	54.06	...	149	0	31.6	7.8
	... ..	Apl. 6	M		24	55.11	...		0	31.7	8.3
451	... ..	Mar. 9	M	9	26	42.23	5	145	2	26.6	8.8
	... ..	" 30	R		26	42.16	...		2	27.1	9.8
	... ..	Apl. 4	M		26	42.17	3		2	26.2	8.8
452	... ..	Mar. 31	R	9	26	55.57	5	144	58	8.4	9.0
453	... ..	Apl. 7	M	9	27	58.54	5	128	45	53.6	8.3
454	4226 Taylor ...	Mar. 8	M	9	28	37.63	5	146	29	33.0	7.0
455	... ..	Feb. 23	R	9	28	54.88	...	128	46	55.4	8.2
456	... ..	Feb. 21	R	9	29	1.22	...	128	49	23.6	6.0
	... ..	Mar. 15	M		29	1.42	4		49	24.2	8.6

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
457	4259 Taylor ...	Mar. 2	M	9	31	57.68	4	138	44	45.5	5.3
458		Mar. 1	M	9	32	27.56	...	129	53	54.2	8.6
		" 19	R		32	27.62	...		53	53.5	9.2
		Apl. 1	M		32	27.71	...		53	53.4	8.5
459		Mar. 17	R	9	32	54.20	5	129	47	34.1	7.8
460	14 Leonis e ...	Jan. 25	R	9	33	53.34	...	79	29	28.4	...
		Apl. 16	R		33	53.36	...		29	20.8	...
461		Mar. 3	M	9	34	43.63	...	130	34	39.5	9.0
		" 7	M		34	43.22	3		34	41.4	8.7
		" 22	R		34	44.01	...		34	37.2	9.0
462		Apl. 8	M	9	35	33.97	5	151	56	22.6	8.5
463	17 Leonis e ...	Feb. 10	R	9	38	7.56	...	65	36	5.9	...
		" 23	R		38	7.56	...		36	6.0	...
		" 24	R		38	7.56	...		36	6.6	...
		Mar. 8	M		38	7.57	...		36	7.7	...
		" 17	R		38	7.45	...		36	5.9	...
		" 19	R		38	7.54	...		36	5.9	...
		" 21	R		38	7.50	...		36	5.0	...
		Apl. 2	M		38	7.61	...		36	6.1	...
464	R Leonis Var. 1 ...	Mar. 31	R	9	40	14.29	...	77	56	32.5	6.0
		Apl. 4	M		40	14.49	5		56	32.8	6.0
		" 5	M		40	14.38	...		56	32.4	6.0
		" 6	M		40	14.45	...		56	31.9	6.0
		" 7	M		40	14.48	...		56	32.1	6.0
465		Jan. 26	R	9	41	50.08	5	130	49	18.8	8.7
466		Mar. 23	R	9	42	42.08	...	130	47	49.2	9.0
467		Mar. 2	M	9	43	27.04	...	143	53	51.3	9.0
		" 22	R		43	27.06	...		53	49.5	8.9
		Apl. 1	M		43	27.16	5		53	50.4	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				A	m.	s.		"	"	"	
468	...	Mar. 9	M	9	43	34.18	...	143	45	55.2	7.7
469	...	Mar. 21	R	9	45	55.30	6	129	2	51.8	8.8
470	70 R. P. L. ...	Mar. 1	M	9	46	18.43	3	5	25	49.5	...
	...	" 14	M		46	17.64	3		25	49.8	...
	...	Apl. 2	M		46	18.06	3		25	49.3	...
471	...	Mar. 3	M	9	46	26.57	...	129	6	56.2	9.4
	...	" 7	M		46	26.51	3		6	56.5	9.0
472	IX. 1057 W. B. N. ...	Feb. 17	R	9	49	44.66	...	85	6	41.9	7.2
	...	" 18	R		49	44.66	...		6	42.3	7.3
	...	" 23	R		49	44.68	...		6	42.0	7.3
473	4402 Taylor ...	Apl. 5	M	9	49	53.39	...	129	47	30.3	7.9
	...	" 6	M		49	53.41	5		47	29.3	7.6
	...	" 12	M		49	53.41	...		47	30.4	7.3
474	29 Leonis v ...	Jan. 25	R	9	53	1.48	...	61	18	17.0	...
	...	Feb. 19	R		53	1.47	...		18	17.5	...
	...	" 22	R		53	1.45	...		18	16.8	...
	...	" 24	R		53	1.44	...		18	18.0	...
	...	" 25	R		53	1.46	...		18	16.1	...
	...	Mar. 11	M		53	1.42	...		18	18.1	...
	...	" 19	R		53	1.54	...		18	17.8	...
	...	Apl. 4	M		53	1.47	...		18	18.6	...
	...	" 14	M		53	1.52	...		18	17.8	...
	...	" 15	M		53	1.30	...		18	17.6	...
475	...	Apl. 9	M	9	53	52.92	4	153	6	48.9	9.3
476	4445 Taylor ...	Feb. 26	R	9	54	43.15	3	147	28	41.9	8.7
	...	Mar. 2	M		54	43.18	...		28	40.8	7.9
	...	" 9	M		54	43.09	...		28	40.6	7.7
	...	Apl. 8	M		54	43.33	5		28	40.0	7.9
477	...	Mar. 7	M	9	56	26.50	...	143	3	50.4	8.3
478	...	Feb. 29	R	9	57	7.36	5	129	56	40.4	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
479	4476 Taylor	Mar. 31	R	9	57	51.23	4	145	36	43	8.5
480	... ..	Apl. 13	M	9	58	25.93	...	150	38	57.8	8.5
	... ..	" 26	R		58	26.02	5		38	58.0	9.0
481	14 Sextantis	Feb. 22	R	9	59	40.60	5	83	43	36.5	...
482	31 Leonis A	Mar. 19	R	10	0	41.11	...	79	20	15.0	...
483	32 Leonis a (<i>Regulus</i>).	Mar. 1	M	10	1	7.57	...	77	22	10.4	...
	... ..	" 10	M		1	7.60	...		22	10.3	...
	... ..	" 16	R		1	7.53	...		22	10.0	...
	... ..	" 23	R		1	7.40	...		22	11.1	...
	... ..	" 30	R		1	7.51	...		22	10.6	...
	... ..	Apl. 1	M		1	7.64	...		22	10.2	...
	... ..	" 2	M		1	7.52	...		22	10.5	...
	... ..	" 4	M		1	7.61	...		22	11.0	...
	... ..	" 5	M		1	7.52	...		22	10.4	...
	... ..	" 6	M		1	7.54	...		22	9.9	...
	... ..	" 7	M		1	7.52	...		22	11.3	...
	... ..	" 12	M		1	7.56	...		22	10.5	...
	... ..	" 14	M		1	7.56	5		22	10.3	...
	... ..	" 15	M		1	7.61	...		22	10.5	...
484	... ..	Feb. 29	R	10	2	46.61	5	129	57	35.4	9.0
485	4538 Taylor	Feb. 26	R	10	6	9.40	...	129	19	26.2	8.3
	... ..	Mar. 11	M		6	9.32	...		19	28.1	7.1
	... ..	Apl. 8	M		6	9.45	4		19	26.9	7.0
486	... ..	Feb. 25	R	10	9	1.48	5	139	51	41.4	...
	... ..	Mar. 14	M		9	1.44	3		51	42.2	9.1
487	72 R. P. L.	Mar. 31	R	10	9	20.53	3	5	3	35.8	...
	... ..	Apl. 15	M		9	20.83	3		3	39.1	...
	... ..	" 16	R		9	20.35	3		3	39.0	...
	 <i>sp.</i>	Oct. 3	M		9	21.11	3		3	35.8	...
	 <i>sp.</i>	Nov. 2	M		9	20.78	2		3	25.5	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
488	4577 Taylor	Mar. 30	R	10	9	47.70	...	128	36	58.9	8.8
	... ..	Apl. 4	M		9	47.77	...		36	57.1	8.7
489	... ..	Apl. 13	M	10	10	15.97	...	139	51	9.0	9.0
490	41 Leonis γ^1	Mar. 3	M	10	12	28.06	...	60	28	20.5	...
	... ..	" 15	M		12	28.21	...		28	20.2	...
	... ..	" 16	R		12	28.15	...		28	19.4	...
	... ..	" 17	R		12	28.14	...		28	20.2	...
	... ..	" 18	R		12	28.20	...		28	20.4	...
	... ..	" 22	R		12	28.21	...		28	19.3	...
	... ..	Apl. 1	M		12	28.13	...		28	20.2	...
	... ..	" 2	M		12	28.22	...		28	20.2	...
	... ..	" 7	M		12	28.12	...		28	19.6	...
	... ..	" 14	M		12	28.18	5		28	19.8	...
	... ..	" 18	R		12	28.19	5		28	20.0	...
	... ..	" 20	R		12	28.27	...		28	19.4	...
491	43 Leonis	Jan. 25	R	10	15	53.31	...	82	46	4.5	...
	... ..	" 26	R		15	53.45	...		46	5.7	...
492	... ..	Mar. 31	R	10	16	8.21	5	75	24	31.4	9.0
	... ..	Apl. 6	M		16	8.18	...		24	29.7	9.3
493	... ..	Feb. 26	R	10	16	11.74	5	129	16	16.4	9.0
	... ..	Mar. 7	M		16	11.83	...		16	16.6	8.8
494	4653 Taylor	Mar. 8	M	10	18	1.94	5	151	23	10.5	8.4
495	45 Leonis	Jan. 25	R	10	20	27.51	4	70	32	43.1	...
	... ..	" 26	R		20	27.46	5		32	44.1	...
	... ..	Apl. 16	R		20	27.53	5		32	45.1	...
496	... ..	Apl. 13	M	10	21	55.82	...	146	59	1.4	9.0
497	30 Sextantis	Mar. 21	R	10	23	20.43	5	80	56	25.8	...
498	... ..	Mar. 16	R	10	23	22.02	4	76	5	16.9	10.0
	... ..	" 19	R		23	22.37	3		5	18.5	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
499	47 Leonis ρ ..	Mar. 18	R	10	25	38.88	...	79	59	41.2	...
		" 22	R		25	38.85	...		59	41.1	...
		Apl. 2	M		25	38.88	..		59	41.4	...
		" 4	M		25	38.81	...		59	42.1	...
		" 7	M		25	38.92	...		59	41.7	...
		" 8	M		25	38.87	.		59	40.6	...
		" 9	M		25	38.83			59	41.3	...
		" 14	M		25	38.86	..		59	41.1	..
		" 16	R		25	38.80	6		59	41.5	..
		" 20	R		25	38.89	..		59	41.6	..
500		Apl. 13	M	10	29	12.38	3	147	54	36.6	9.2
501		Apl. 16	R	10	34	52.10	5	139	16	37.9	9.7
		" 25	R		34	52.19	5		16	38.9	9.5
502		Apl. 26	R	10	35	22.25	...	137	19	31.7	9.2
503	36 Sextantis ...	Mar. 21	R	10	38	8.91	...	86	47	51.7	..
504		Apl. 4	M	10	38	46.07	...	144	50	22.2	8.2
		" 13	M		38	46.93	...		50	19.8	7.9
		" 15	M		38	47.32	3		50	21.3	7.9
505	η Argus Var 1	Feb. 24	R	10	39	47.52	...	148	58	13.4	...
		Apl. 2	M		39	47.48	...		58	14.4	...
		" 20	R		39	47.35	...		58	12.3	..
506		Mar. 15	M	10	41	25.52	...	146	23	11.9	9.0
507	53 Leonis ι ...	Mar. 16	R	10	42	6.37	..	78	44	9.9	...
		" 18	R		42	6.37	...		44	10.8	...
		" 22	R		42	6.35	...		44	10.8	...
		Apl. 1	M		42	6.36	..		44	9.9	...
		" 6	M		42	6.27	..		44	10.5	...
		" 7	M		42	6.48	..		44	10.5	...
		" 8	M		42	6.36	..		44	9.3	..
		" 9	M		42	6.38	..		44	10.7	...
		" 12	M		42	6.31	..		44	10.4	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1864.			No. of Wires.	Mean Polar Distance, 1864.			Magnitude.
				A.	m.	s.		"	"	"	
507	53 Leonis l	Apl. 19	R	10	42	6.31	...	78	44	10.4	...
	... ..	May. 10	M		42	6.39	...		44	10.3	...
508	4886 Taylor	Mar. 4	M	10	42	47.47	...	157	2	0.2	7.0
509	... ..	Apl. 14	M	10	45	4.05	3	141	45	5.6	7.9
	... ..	" 26	R		45	4.19	4		45	4.6	8.2
	... ..	" 28	R		45	4.16	5		45	3.7	8.3
510	... ..	Apl. 26	R	10	46	2.79	5	141	39	51.2	8.4
511	... ..	Apl. 20	R	10	47	52.85	...	150	5	33.6	9.0
512	... ..	Apl. 5	M	10	47	59.18	5	129	29	12.6	8.9
513	... ..	Mar. 22	R	10	50	16.20	5	144	30	30.0	9.0
514	4965 Taylor	Apl. 13	M	10	50	40.47	...	147	19	36.3	6.8
515	... ..	Mar. 23	R	10	52	18.91	...	143	36	15.0	9.0
516	... ..	Apl. 4	M	10	52	52.73	6	139	32	46.6	8.3
	... ..	May 10	M		52	52.75	...		32	46.4	8.8
517	50 Leonis c	Feb. 22	R	10	53	41.72	...	83	10	6.6	...
	... ..	" 23	R		53	41.73	...		10	7.2	...
518	61 Leonis p'	Jan. 16	R	10	54	53.58	...	91	45	12.8	...
519	50 Ursa Majoris a ...	Apl. 15	M	10	55	18.59	4	27	30	56.1	...
	... ..	" 18	R		55	18.49	...		30	59.2	...
	... ..	" 29	R		55	18.58	4		30	56.3	...
520	... ..	May 13	M	10	56	59.48	...	145	32	37.4	8.2
521	... ..	Apl. 25	R	10	57	1.96	5	145	25	40.0	9.3
522	4576 Lacaille	Mar. 4	M	10	57	48.82	4	129	34	32.7	8.0
	... ..	May 12	M		57	48.88	...		34	33.4	7.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
523	63 Leonis χ ..	Feb. 24	R	10	58	0.02	...	81	55	47.2	...
		Mar. 19	R		58	0.07	..		55	47.0	...
		" 21	R		58	0.17	...		55	45.8	...
		" 23	R		58	0.12	4		55	46.5	...
		" 30	R		57	59.97	...		55	46.3	...
		" 31	R		57	59.99	...		55	46.5	...
		Apl. 5	M		58	0.04	...		55	47.1	...
		" 8	M		57	59.95	...		55	45.7	...
		" 9	M		58	0.01	..		55	46.7	...
		" 13	M		57	59.95	...		55	46.3	...
		May 10	M		58	0.09	4		55	46.6	...
524	...	Apl. 27	R	10	58	11.95	...	140	59	14.9	9.2
525	65 Leonis p^3 ...	Apl. 18	R	10	59	57.96	5	87	18	29.9	...
526	...	Apl. 29	R	11	0	36.53	5	149	13	43.7	9.7
527	21367 Lalande ..	May 16	M	11	3	18.75	...	78	5	47.8	8.0
528	...	May 14	M	11	4	20.19	..	150	14	31.1	8.2
529	5092 Taylor ...	Apl. 30	R	11	5	18.86	5	103	49	7.7	8.8
530	...	Mar. 21	R	11	5	41.13	..	83	50	24.5	9.8
		" 22	R		5	41.07	...		50	25.1	10.0
531	69 Leonis p^4 ..	Feb. 22	R	11	6	47.53	5	89	19	48.4	...
532	68 Leonis δ ...	Feb. 25	R	11	6	52.25	...	68	47	51.7	...
		Mar. 19	R		6	52.26	..		43	55.0	...
		" 23	R		6	52.28	...		43	53.7	...
		" 30	R		6	52.30	..		43	55.1	...
		" 31	R		6	52.27	..		43	55.7	...
		Apl. 9	M		6	52.33	...		43	55.6	...
		" 12	M		6	52.27	..		43	56.3	...
		" 13	M		6	52.24	3		43	54.8	...
		" 15	M		6	52.33	..		43	55.9	...
		" 20	R		6	52.24	..		43	55.1	...

Separate Results of Madras Meridian Circle Observations in 1861.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1861.			Magnitude.
				h.	m.	s.		°	'	"	
533		Apl. 29	R	11	7	7.12	..	145	40	14.0	8.2
534		May 13	M	11	8	34.11	...	160	50	49.2	8.0
535		May 4	R	11	9	25.70	5	145	55	13.9	9.8
536	74 Leonis ϕ	Jan. 26	R	11	9	45.02	...	92	54	32.6	...
		Mar. 21	R		9	44.85	4		54	32.0	...
		" 22	R		9	44.91	4		54	31.8	...
		Apl. 18	R		9	44.51	...		54	31.5	...
537		Apl. 26	R	11	10	31.90	...	141	8	35.7	9.8
538		Apl. 27	R	11	11	8.16	6	127	38	22.5	9.0
539	12 Crateria δ	Feb. 25	R	11	12	32.55	...	104	2	33.7	...
		Mar. 23	R		12	32.61	..		2	34.3	...
		" 30	R		12	32.61	...		2	35.0	...
		" 31	R		12	32.58	...		2	34.4	...
		Apl 16	R		12	32.57	..		2	35.0	...
		" 19	R		12	32.54	..		2	34.1	...
		" 25	R		12	32.60	...		2	35.3	...
		May 5	R		12	32.53	.		2	34.8	...
											
540		Apl. 30	R	11	12	48.64	—	129	32	6.0	8.2
		May 12	M		12	48.54	.		32	7.3	7.7
		" 14	M		12	48.65	...		32	7.0	7.9
541	4726 Lacaille..	Apl 29	R	11	16	5.19	..	145	51	29.0	8.0
		May 2	R		16	5.22	...		51	28.9	7.2
542	5220 Taylor	Apl. 30	R	11	19	0.55	...	131	55	30.6	8.2
		May 4	R		19	0.39	—		55	30.1	8.5
		" 13	M		19	0.61	5		55	31.7	7.6
543		Apl 28	R	11	19	24.95	—	129	30	57.8	8.6
544		Mar. 30	R	11	21	41.86	5	128	32	47.4	9.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
545	...	Mar. 21	R	11	22	7.53	...	129	4	15.7	7.8
	...	Apl. 16	R		22	7.53	...		4	16.3	8.5
	...	" 27	R		22	7.50	...		4	15.1	8.5
	...	May 14	M		22	7.77	...		4	15.0	7.5
546	...	Apl. 25	R	11	22	48.14	...	145	53	44.9	9.0
547	...	Apl. 26	R	11	23	11.85	...	142	52	33.9	9.0
548	87 Leonis ϵ	May 16	M	11	23	21.58	...	92	15	13.0	...
549	...	May 2	R	11	24	35.16	5	146	8	57.3	9.0
	...	" 4	R		24	35.16	...		8	57.5	9.2
550	...	Apl. 29	R	11	26	14.07	...	143	51	15.0	9.0
	...	" 30	R		26	15.07	5		51	15.3	9.2
551	...	Apl. 28	R	11	26	39.58	5	23	17	32.2	10.2
552	...	Apl. 26	R	11	29	50.97	5	149	15	40.3	8.5
553	91 Leonis ν	Feb. 23	R	11	29	59.09	...	90	4	24.1	...
	...	" 24	R		29	59.15	...		4	24.0	...
	...	Mar. 18	R		29	59.15	...		4	24.3	...
	...	" 21	R		29	59.05	...		4	24.1	...
	...	Apl. 5	M		29	59.17	...		4	24.2	...
	...	" 6	M		29	59.23	...		4	24.0	...
	...	" 13	M		29	59.19	...		4	24.8	...
	...	" 16	R		29	59.10	5		4	24.6	...
	...	" 18	R		29	59.12	...		4	24.7	...
	...	" 27	R		29	59.08	...		4	23.3	...
	...	May 2	R		29	59.13	...		4	24.4	...
	...	" 10	M		29	59.05	...		4	25.0	...
	...	" 18	M		29	59.19	...		4	23.5	...
554	...	Apl. 25	R	11	32	9.19	...	144	14	32.4	9.2
555	...	Apl. 29	R	11	33	57.32	...	127	40	16.1	8.8
556	...	Mar. 31	R	11	34	20.21	5	144	20	39.4	8.8

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No of Wires.	Mean Polar Distance. 1864.			Magnitude.
				A.	m.	s.		°	'	"	
557		Apl. 30	R	11	36	3.21	5	139	40	16.3	9.0
558	5384 Taylor	May 2	R	11	37	2.83	8	151	41	6.6	6.0
		" 10	M		37	2.86	...		41	7.9	6.0
559		May 3	R	11	38	0.35	4	140	38	40.4	8.0
560		Apl. 28	R	11	38	42.13	...	129	84	5.1	9.8
561		May 19	M	11	40	56.86	...	149	52	2.4	7.9
562		Apl. 4	M	11	41	9.08	...	126	30	25.6	8.7
563		Apl. 5	M	11	41	12.31	...	129	32	6.9	8.4
		" 28	R		41	12.41	...		32	5.6	8.0
564	94 Leonis β	Mar. 22	R	11	42	7.21	...	74	40	4.5	...
		" 31	R		42	7.22	...		40	4.8	...
		Apl. 6	M		42	7.20	5		40	5.0	...
		" 8	M		42	7.24	...		40	5.2	...
		" 16	R		42	7.29	...		40	5.4	...
		" 21	R		42	7.12	...		40	4.9	...
		" 25	R		42	7.14	...		40	4.7	...
		" 26	R		42	7.13	...		40	5.2	...
		" 27	R		42	7.20	...		40	5.3	...
		May 2	R		42	7.27	...		40	4.3	...
		" 12	M		42	7.28	...		40	5.2	...
565		Apl. 29	R	11	43	8.20	...	143	45	15.4	9.0
		May 13	M		43	8.36	...		45	16.0	7.9
566	5 Virginis β	Feb. 23	R	11	43	36.60	...	87	28	8.6	...
		" 24	R		43	36.73	...		28	9.3	...
		Apl. 18	R		43	36.62	...		28	8.3	...
		" 19	R		43	36.65	...		28	8.3	...
567	5427 Taylor	May 20	M	11	44	5.15	...	94	34	38.6	6.0
568		Apl. 30	R	11	44	44.16	...	129	2	40.7	8.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
569	5433 Taylor ...	Apl. 29	R	11	44	51.57	...	129	30	3.0	7.7
570	... ..	May 3	R	11	45	51.40	5	142	31	0.6	9.3
571	64 Ursa Majoris γ ...	Apl. 21	R	11	46	39.67	...	35	32	50.9	...
572	... ..	Mar. 31	R	11	49	57.01	...	128	5	29.8	8.7
	... ..	Apl. 27	R		49	56.91	...		5	29.3	8.7
573	... ..	Apl. 4	M	11	51	23.65	...	128	52	34.2	8.4
574	... ..	Apl. 25	R	11	51	36.57	...	144	12	54.1	9.3
575	... ..	May 10	M	11	52	20.94	...	154	32	32.2	...
576	... ..	Apl. 29	R	11	53	50.26	5	129	35	50.5	9.8
	... ..	May 14	M		53	50.07	5		35	49.6	9.6
577	... ..	Feb. 25	R	11	56	23.62	5	128	29	56.4	9.0
	... ..	Apl. 27	R		56	23.61	...		29	55.7	9.3
	... ..	May 13	M		56	23.58	...		29	55.2	8.5
578	5534 Taylor ...	Apl. 30	R	11	56	49.55	...	143	57	19.9	8.0
579	4995 Lacaille ...	Apl. 26	R	11	56	51.06	...	142	44	26.8	7.8
580	5535 Taylor ...	Mar. 31	R	11	57	3.46	5	70	25	28.9	8.0
	... ..	May 3	R		57	3.48	...		25	30.5	7.5
581	89 R. P. L. ...	Apl. 6	M	11	57	51.03	3	3	39	31.9	...
	... ..	May 12	M		57	51.57	3		39	35.0	...
	... ..	Nov. 5	M		57	51.06	3		39	33.9	...
582	... ..	Feb. 26	R	11	59	1.15	4	128	27	45.6	8.3
	... ..	Apl. 27	R		59	1.28	...		27	45.1	8.0
583	... ..	Apl. 29	R	11	59	44.39	5	144	16	10.7	9.0
	... ..	May 16	M		59	44.27	4		16	11.7	8.0
584	... ..	May 4	R	12	1	37.16	4	130	1	34.8	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
585	5041 Lacaille	Apr. 14	M	12	2	32.58	...	141	23	14.3	7.0
586	... ..	May 5	R	12	2	37.25	...	141	5	39.5	9.0
587	10 Virginia ..	Apr. 18	R	12	2	43.10	...	67	20	18.4	...
588	2 Corvi ..	Apr. 4	M	12	3	8.07	5	111	51	47.8	...
	... ..	" 13	M		3	8.14	..		51	47.9	...
	... ..	" 25	R		3	8.03	...		51	47.1	...
	... ..	" 26	R		3	8.02	...		51	47.4	...
	... ..	" 27	R		3	8.07	5		51	47.4	...
	... ..	May 14	M		3	8.16	...		51	47.1	...
	... ..	" 17	M		3	8.16	...		51	47.5	...
	... ..	" 18	M		3	7.98	...		51	47.5	...
589	... ..	May 3	R	12	6	3.08	5	130	11	7.8	9.0
590	... ..	Apr. 8	M	12	6	12.47	...	138	27	32.0	8.2
591	5613 Taylor ...	May 2	R	12	7	55.44	...	130	22	49.0	8.0
592	69 Urse Majoris ..	May 13	M	12	8	40.54	...	32	12	42.6	...
	... ..	" 19	M		8	41.11	...		12	42.1	...
593	... ..	Apr. 29	R	12	8	50.14	...	141	20	13.0	8.8
594	13 Virginia ...	Mar. 22	R	12	11	41.99	..	91	1	51.6	...
	... ..	" 23	R		11	42.14	...		1	51.0	...
595	5648 Taylor ..	Apr. 14	M	12	12	31.23	...	152	5	54.2	6.0
	... ..	May 12	M		12	31.30	5		5	57.2	6.0
	... ..	" 20	M		12	31.07	...		5	57.0	6.8
596	15 Virginia ..	Apr. 18	R	12	12	56.01	...	80	54	38.2	...
	... ..	" 19	R		12	56.01	..		54	39.1	...
	... ..	" 26	R		12	56.01	..		54	37.9	...
	... ..	" 27	R		12	56.89	...		54	39.4	...
	... ..	" 30	R		12	56.88	..		54	38.9	...
	... ..	May 16	M		12	56.93	...		54	39.9	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
597	... ..	May 4	R	12	14	3.66	4	113	44	49.8	9.5
598	5119 Lacaille	Apl. 8	M	12	15	21.68	...	138	34	15.4	8.4
599	... ..	May 14	M	12	16	46.01	...	147	9	46.4	8.0
600	... ..	Feb. 24	R	12	17	24.29	...	24	43	7.4	8.9
		May 2	R		17	24.16	4		43	7.1	8.5
601	... ..	May 5	R	12	18	39.10	...	113	30	8.0	9.5
602	... ..	Apl. 27	R	12	19	0.47	5	129	43	47.8	
603	α Crucis (1st)	Apl. 21	R	12	19	3.38	...	152	20	42.1	...
		May 18	M		19	3.65	5		20	42.6	...
604	... ..	May 13	M	12	21	6.90	...	145	42	20.9	8.0
		" 19	M		21	6.78	...		42	17.0	8.0
605	... ..	Apl. 14	M	12	24	38.55	...	150	58	39.2	8.3
		May 12	M		24	38.61	3		58	38.5	8.2
606	... ..	Apl. 29	R	12	25	56.04	5	28	2	1.0	7.5
607	21 Virginis γ	Feb. 24	R	12	26	45.81	...	98	42	6.2	...
		Mar. 22	R		26	45.81	...		42	4.3	...
		" 23	R		26	45.78	...		42	4.5	...
		May 16	M		26	45.74			42	5.6	6.0
		" 17	M		26	45.89	...		42	5.9	6.0
608	... ..	May 14	M	12	27	4.41	...	38	0	26.8	8.0
609	γ Corvi β	Apl. 21	R	12	27	14.82	...	112	38	39.0	...
		May 6	R		27	14.84	...		38	39.3	...
		" 6	R		27	14.91	...		38	39.1	...
		" 7	R		27	14.85	...		38	39.3	...
610	... ..	May 4	R	12	27	49.34	5	140	55	32.3	9.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
611	T Ursa Majoris Var.3.	Mar. 31	R	12	30	11.19	6	29	45	49.3	9.5
	... ..	May 3	R		30	11.00	...		45	49.6	8.0
	... ..	" 19	M		30	11.30	...		45	49.6	7.5
612	... ..	May 24	R	12	30	50.84	5	142	19	41.5	9.2
613	R Virginia Var. 2 ...	Apl. 22	R	12	31	35.78	...	82	15	46.4	9.5
	... ..	May 13	M		31	35.88	...		15	47.8	6.0
	... ..	" 19	M		31	35.82	...		15	47.6	6.1
	... ..	" 20	M		31	35.91	...		15	47.7	6.6
614	... ..	Apl. 30	R	12	32	8.63	6	29	14	18.8	10.0
	... ..	May 2	R		32	8.53	...		14	21.4	9.5
615	26 Virginia X ...	Feb. 24	R	12	32	13.80	...	97	14	47.9	...
	... ..	Apl. 19	R		32	13.77	5		14	47.9	...
	... ..	" 20	R		32	13.76	...		14	48.2	...
	... ..	May 16	M		32	13.72	...		14	47.9	6.0
616	... ..	Apl. 29	R	12	32	51.66	...	28	13	23.1	7.0
617	5530 Taylor...	May 12	M	12	34	26.89	...	144	0	51.4	7.5
618	X11 592 W. B. E. ...	Apl. 13	M	12	36	1.17	...	93	17	48.5	8.0
	... ..	" 14	M		36	1.29	...		17	48.6	8.0
	... ..	" 15	M		36	1.43	...		17	48.7	8.0
619	S Ursa Majoris Var.2	Apl. 22	R	12	37	58.27	...	28	9	41.7	9.5
	... ..	May 6	R		37	58.37	...		9	42.6	8.9
620	... ..	Apl. 5	M	12	39	36.14	...	94	1	52.6	9.6
	... ..	" 6	M		39	36.24	...		1	53.6	9.7
	... ..	" 7	M		39	36.36	...		1	54.6	9.6
621	... ..	May 14	M	12	40	49.04	5	141	53	54.0	7.9
622	... ..	May 7	R	12	41	40.06	5	141	49	33.0	8.0
623	... ..	May 19	M	12	42	3.34	...	147	16	27.3	9.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
624	...	May 13	M	12	42	47.33	...	142	51	56.9	8.7
625	...	May 26	R	12	42	51.08	...	139	23	15.5	9.3
626	...	May 12	M	12	43	17.33	...	129	7	50.7	8.3
627	...	Apl. 28	R	12	43	26.16	5	53	19	14.1	8.8
	...	May 5	R		43	26.02	...		19	14.8	9.0
	...	" 20	M		43	26.06	...		19	14.4	8.7
	...	" 24	R		43	26.09	5		22	15.0	9.0
628	U Virginis Var. 3	Apl. 29	R	12	44	11.66	5	53	42	18.4	8.7
	...	May 3	R		44	11.77	...		42	21.9	9.3
	...	" 6	R		44	11.92	5		42	21.3	9.8
629	2922 Radeliffe	May 18	M	12	45	6.74	...	26	16	27.1	6.2
630	...	Apl. 28	R	12	45	10.16	4	53	19	5.4	9.7
	...	May 5	R		45	10.04	...		19	7.5	9.8
	...	" 24	R		45	10.17	5		19	7.7	9.5
631	40 Virginis ♀	Apl. 19	R	12	47	16.91	...	98	47	58.2	...
	...	" 20	R		47	17.05	...		47	58.4	...
632	99 R. P. L.	May 17	M	12	48	9.91	2	5	50	52.8	...
633	...	May 14	M	12	49	23.85	6	145	34	11.3	7.8
634	12 Can. Venaticorum	Apl. 22	R	12	49	39.68	...	50	56	47.9	...
	...	" 26	R		49	39.62	...		56	47.9	...
	...	May 3	R		49	39.62	...		56	48.5	...
	...	" 4	R		49	39.60	...		56	47.7	...
	...	" 6	R		49	39.53	...		56	47.4	...
	...	" 7	R		49	39.52	...		56	48.6	...
	...	" 13	M		49	39.73	...		56	48.6	...
	...	" 16	M		49	39.64	...		56	47.1	...
	...	" 19	M		49	39.60	3		56	48.7	...
	...	" 25	R		49	39.58	...		56	48.3	...
	...	" 26	R		49	39.63	...		56	48.5	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
635	5974 Taylor...	May 28	R	12	51	54.65	...	143	38	34.3	8.7
636	... ..	May 20	M	12	53	16.40	...	143	40	22.3	8.8
637	... ..	May 24	R	12	54	37.89	...	139	18	22.8	9.2
638	... ..	Apl. 22	R	12	56	10.93	3	113	12	31.8	10.2
		" 25	R		56	11.09	4		12	32.0	10.3
639	5381 Lacaille	May 25	R	12	57	7.84	...	129	57	6.1	8.8
640	... ..	May 14	M	12	58	6.33	6	124	28	41.2	9.1
		" 19	M		58	6.10	5		28	42.0	9.0
641	50 Virginis...	Mar. 23	R	13	2	38.29	...	99	36	11.9	...
		May 17	M		2	38.32	...		36	10.9	6.0
		" 18	M		2	38.25	...		36	11.1	6.0
642	51 Virginis θ	Apl. 28	R	13	2	54.61	...	94	48	43.3	...
		" 29	R		2	54.58	...		48	43.3	...
		May 3	R		2	54.57	...		48	44.3	...
		" 4	R		2	54.58	...		48	43.4	...
		" 7	R		2	54.60	...		48	43.8	...
		" 12	M		2	54.60	...		48	44.1	...
		" 13	M		2	54.65	...		48	44.6	...
		" 16	M		2	54.58	...		48	45.0	...
		" 24	R		2	54.62	...		48	44.8	...
		" 25	R		2	54.57	...		48	44.9	...
		" 26	R		2	54.56	...		48	43.8	...
643	... ..	May 31	R	13	4	32.13	4	135	10	22.3	9.0
644	W. Virginis Var 1 ..	Feb. 25	R	13	6	54.20	5	105	49	53.3	...
		Apl. 18	R		6	54.17	4		49	55.4	9.5
		" 25	R		6	54.19	...		49	54.9	8.0
		May 20	M		6	54.17	...		49	55.1	7.7
645	... ..	May 14	M	13	9	45.48	...	129	56	15.3	8.0
		" 19	M		9	45.45	...		56	16.0	8.2

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
646	58 Virginis	Mar. 23	R	13	10	19.73	...	99	49	42.7	...
647	101 R. P. L.	Apl. 26	R	13	10	26.73	3	1	37	17.0	...
	... ..	May 5	R		10	26.00	3		37	16.5	...
	 s.p.	Oct. 27	R		10	25.61	3		37	17.3	...
648	6129 Taylor	May 18	M	13	12	12.90	3	130	28	30.9	7.4
	... ..	" 21	M		12	12.90	...		28	29.8	7.4
649	... ..	Apl. 29	R	13	12	53.10	...	122	56	34.2	7.8
650	5503 Lacaille	Apl. 12	M	13	14	8.90	...	125	23	51.8	7.8
	... ..	May 31	R		14	8.93	...		23	50.9	...
651	13563 O. A. N.	May 30	R	13	15	24.40	..	27	53	14.0	8.5
652	... ..	May 24	R	13	15	47.75	...	145	12	51.0	8.5
653	67 Virginis α (Spica)	Feb. 25	R	13	18	1.87	...	100	27	1.9	...
	... ..	Apl. 20	R		18	1.87	..		27	1.8	...
	... ..	" 21	R		18	1.82	...		27	2.3	...
	... ..	" 28	R		18	1.85	...		27	1.6	...
	... ..	" 29	R		18	1.89	...		27	1.1	...
	... ..	May 3	R		18	1.89	...		27	2.7	...
	... ..	" 12	M		18	1.81	...		27	2.2	...
	... ..	" 13	M		18	1.80	...		27	1.7	...
	... ..	" 14	M		18	1.85	...		27	1.1	..
	... ..	" 17	M		18	1.90	...		27	2.6	...
	... ..	" 20	M		18	1.74	...		27	2.5	...
	... ..	" 21	M		18	1.87	...		27	1.0	...
	... ..	" 26	R		18	1.86	...		27	2.0	...
	... ..	June 14	M		18	1.86	...		27	1.6	..
654	V Virginis Var. 7	Apl. 16	R	13	20	46.90	...	92	27	59.2	9.3
655	R Hydrae Var. 1	Mar. 16	M	13	22	17.30	..	112	34	28.9	5.5
656	... ..	Apl. 27	R	13	23	18.12	3	88	28	7.3	10.5
657	6257 Taylor	June 2	R	13	25	36.07	6	168	48	21.6	8.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1964.			Magnitude.
				h.	m.	s.		°	'	"	
658	76 Virginia A ...	Apl. 20	R	13	25	48.62	...	99	27	46.0	...
		" 21	R		25	48.37	...		27	47.3	...
		June 16	R		25	48.47	5		27	48.0	...
659	S Virginia Var. 6 ...	Apl. 12	M	13	25	54.01	...	96	29	41.5	7.7
		May. 23	R		25	53.94	...		29	42.2	6.3
660		June 3	E	13	26	37.79	5	131	35	11.9	8.8
661	79 Virginia S ...	Apl. 28	R	13	27	45.90	...	89	53	58.3	...
		" 29	R		27	45.89	...		53	58.6	...
		" 30	R		27	45.90	...		53	58.7	...
		May 2	R		27	45.93	...		53	59.3	...
		" 3	R		27	45.86	...		53	59.6	...
		" 4	R		27	45.91	5		53	58.6	...
		" 5	R		27	45.81	...		53	58.9	...
		" 10	M		27	45.78	...		53	59.0	...
		" 13	M		27	45.88	...		53	58.9	...
		" 14	M		27	45.85	...		53	57.6	...
		" 17	M		27	45.89	...		53	59.0	...
		" 19	M		27	45.87	...		53	58.8	...
		" 20	M		27	45.88	...		53	59.3	...
		" 21	M		27	45.90	...		53	57.1	...
		" 30	R		27	45.86	...		53	54.5	...
662		May 24	R	13	36	31.14	5	144	38	15.4	9.0
		June 2	R		36	31.47	6		38	15.5	9.5
663	6363 Taylor ...	May 25	R	13	36	38.28	...	147	33	27.4	8.8
664		May 2	R	13	37	30.52	5	123	45	3.5	9.7
		" 30	R		37	30.21	5		45	3.2	9.5
665		May 20	M	13	37	31.19	...	128	40	16.9	7.7
666		May 3	R	13	38	13.85	6	122	47	5.3	8.7
		" 19	M		38	13.87	6		47	3.1	8.4
667		May 16	M	13	38	33.84	5	152	45	59.0	8.0
		" 21	M		38	34.10	5		45	59.0	8.3

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
668		May 4	R	13	40	30.30	...	129	24	0.6	9.2
669	85 Ursæ Majoris γ ...	Apl. 30	R	13	42	10.62	...	40	0	24.9	—
		May 7	R	42	10.59	...	...	0	25.6	—	—
		" 23	R	42	10.66	...	...	0	25.8	—	—
670		May 5	R	13	43	14.30	..	123	6	31.9	8.7
		" 17	M	43	14.47	...	...	6	31.9	—	8.0
671		May 18	M	13	43	24.14	5	123	13	4.9	8.2
672		May 29	R	13	44	15.25	...	127	56	40.0	...
673		May 30	R	13	45	23.48	...	128	23	4.5	9.0
674		May 3	R	13	45	42.35	...	122	54	30.9	8.5
		" 31	R	45	42.44	5	...	54	31.7	—	...
675	8 Bootis γ	Apl. 30	R	13	48	12.51	...	70	55	10.7	..
		May 2	R	48	12.47	...	...	55	10.4	—	..
		" 4	R	48	12.56	5	...	55	10.7	—	...
		" 6	R	48	12.50	...	...	55	10.5	—	—
		" 7	R	48	12.45	...	...	55	10.4	—	...
		" 10	M	48	12.53	...	...	55	10.7	—	..
		" 19	M	48	12.54	..	...	55	11.4	—	...
		" 20	M	48	12.65	..	...	55	11.1	—	..
		" 23	R	48	12.49	...	...	55	10.3	—	...
		" 24	R	48	15.52	...	...	55	10.3	—	...
		" 25	R	48	12.47	...	...	55	10.4	—	...
		June 2	R	48	12.50	...	...	55	10.2	—	...
		" 14	M	48	12.47	...	...	55	9.3	—	...
		...	...	...	...	...	...	...	...	...	...
676		Apl. 19	R	13	50	11.63	4	123	43	43.6	8.3
		May 5	R	50	11.60	...	...	43	44.4	—	8.2
677		Apl. 19	R	13	50	40.64	5	123	43	55.5	8.0
678		May 13	M	13	53	7.78	5	125	40	51.4	8.4

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
679	93 Virginia γ ..	Apl. 22	R	13	54	43.57	...	87	47	44.9	...
		" 28	R		54	43.56	...		47	45.1	...
		" 29	R		54	43.57	...		47	44.2	...
		" 30	R		54	43.59	...		47	44.9	...
		May 12	R		54	43.60	...		47	45.3	...
		" 14	M		54	43.59	...		47	44.9	...
		" 23	R		54	43.57	...		47	46.4	...
		" 24	R		54	43.54	...		47	45.7	...
		" 25	R		54	43.61	...		47	45.7	...
		" 28	R		54	43.66	...		47	45.7	...
		" 30	R		54	43.60	...		47	45.5	...
		June 2	R		54	43.61	...		47	45.2	...
		" 14	M		54	43.49	...		47	45.0	...
680	5794 Lacaille ...	May 21	M	13	57	4.80	...	152	47	31.0	6.3
681	6585 Taylor ...	May 5	R	14	1	22.44	...	124	14	3.6	7.7
682	... ..	May 24	R	14	2	25.92	4	129	4	15.8	9.0
		June 3	R		2	25.99	...		4	14.5	9.0
683	U Bootis α Var 4 ..	Apl. 22	R	14	4	21.56	4	70	32	32.1	9.2
		May 28	R		4	21.70	...		32	31.3	9.6
		June 2	R		4	21.67	5		32	33.2	9.7
684	6616 Taylor...	May 14	M	14	5	30.32	...	116	26	48.4	5.7
685	98 Virginia χ ...	May 18	M	14	5	38.69	3	90	38	19.9	...
		" 19	M		5	38.55	...		38	20.4	...
686	... ..	May 12	M	14	6	8.79	...	135	1	18.1	8.2
687	16 Bootis α (Arcturus)	May 23	R	14	9	27.53	...	70	6	29.8	...
		" 28	R		9	27.51	...		6	29.5	...
		June 2	R		9	27.54	...		6	30.5	...
		" 4	R		9	27.52	...		6	29.6	...
		" 7	R		9	27.54	...		6	29.6	...
		" 10	M		9	27.60	...		6	31.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				h.	m.	s.		°	'	"	
688	100 Virginis A	Apl. 21	R	14	11	45.23	...	102	41	35.4	...
	...	" 22	R		11	45.13	...	44	36.1	...	...
	...	May 18	M		11	45.12	...	44	36.1	...	...
	...	June 16	R		11	45.31	...	44	35.6	...	...
	...	" 16	R		11	45.15	5	44	36.0	...	...
689	...	May 5	R	14	12	30.81	...	136	49	53.7	9.6
690	...	May 23	R	14	14	34.45	5	122	35	44.2	9.0
	...	June 27	M		14	34.30	4		35	44.9	8.8
691	...	May 14	M	14	15	19.50	6	122	11	35.6	8.7
692	6709 Taylor...	June 3	R	14	15	58.65	...	119	3	19.6	7.0
693	2 Libræ	Apl. 22	R	14	16	6.76	...	101	5	28.8	...
694	5926 Lacaille	May 28	R	14	16	40.21	...	118	59	57.9	8.8
	...	June 2	R		16	40.19	4		59	58.6	7.5
	...	" 7	R		16	40.20	4		59	58.1	8.5
695	6721 Taylor...	Apl. 21	R	14	17	22.38	5	101	3	1.7	...
696	...	June 4	R	14	17	24.96	...	123	13	23.0	10.0
697	6740 Taylor...	May 24	R	14	19	5.13	4	133	42	50.5	7.2
	...	" 31	R		19	5.10	5		42	55.0	7.7
	...	June 29	M		19	5.01	...		42	56.5	7.3
698	...	May 28	R	14	21	57.61	4	122	33	58.6	9.3
699	5962 Lacaille	Apl. 27	R	14	22	42.28	...	120	46	44.0	7.5
700	...	June 17	R	14	23	42.53	...	136	54	23.6	...
701	...	May 23	R	14	24	12.79	5	123	45	36.4	8.8
	...	July 1	M		24	12.71	...		45	35.2	8.0
702	14634 O. A. N.	June 16	R	14	25	51.40	3	20	5	24.1	7.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				A.	m.	s.		°	'	"	
703	25 Bootis ρ	May 6	R	14	25	58.01	...	59	1	49.8	...
		" 21	M		25	58.18	...		1	49.4	...
		" 30	R		25	58.01	...		1	49.5	...
		" 31	R		25	58.11	...		1	49.5	...
		June 2	R		25	58.01	...		1	49.3	...
		" 3	R		25	57.99	...		1	49.2	...
		" 4	R		25	58.07	...		1	49.3	...
		" 8	R		25	58.10	...		1	49.7	...
704	14052 O. A. N.	June 16	R	14	27	1.13	4	20	6	57.6	8.5
705	R Camelopardi Var. 1	May 5	R	14	28	9.31	1	5	33	16.5	10.8
706		May 24	R	14	29	26.79	...	124	55	30.2	8.0
707	α^3 Centauri	June 4	R	14	30	23.05	...	150	16	24.1	...
		" 15	R		30	23.09	...		16	23.9	...
708		May 23	R	14	32	42.12	...	121	44	17.9	8.3
709	α Lupi	June 3	R	14	32	54.02	4	136	48	6.9	5.8
710	36 Bootis ϵ	May 18	M	14	39	2.87	...	63	21	3.6	...
		" 28	R		39	2.80	...		21	2.9	...
		" 30	R		39	2.94	...		21	4.0	...
		June 3	R		39	2.95	5		21	4.7	...
		" 4	R		39	2.81	...		21	3.7	...
		" 8	R		39	2.87	...		21	4.1	...
		" 15	R		39	2.79	...		21	3.7	...
		" 16	R		39	2.76	...		21	3.1	...
		" 17	R		39	2.83	...		21	3.4	...
		" 24	M		39	2.81	...		21	3.8	...
		July 7	R		39	2.79	...		21	3.2	...
711		May 21	M	14	39	20.33	5	124	9	35.2	7.7
		June 2	R		39	20.47	...		9	34.9	7.7
712		May 2	R	14	42	24.90	5	129	6	51.0	8.8
		" 23	R		42	24.77	...		6	50.3	8.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
713	9 Libræ α^2 ...	Apl. 22	R	14	43	21.42	...	105	28	28.2	...
	... ..	May 19	M	43	21.52	...	...	28	28.1	...	...
	... ..	" 20	M	43	21.53	...	...	28	28.0	...	...
	... ..	June 3	R	43	21.46	...	...	28	28.0	...	...
	... ..	" 1	R	43	21.50	...	...	28	28.1	...	...
	... ..	" 7	R	43	21.53	...	...	28	27.9	...	...
	... ..	" 14	M	43	21.57	...	...	28	27.7	...	...
	... ..	" 15	R	43	21.57	...	...	28	28.2	...	...
	... ..	" 17	R	43	21.57	...	...	28	27.6	...	...
	... ..	" 18	R	44	21.58	...	...	28	28.1	...	...
	... ..	" 24	M	43	21.47	2	...	28	27.6	...	...
	... ..	July 7	R	43	21.53	...	...	28	27.5	...	...
714	7 Urræ Min. β Var. 1	May 28	R	14	51	8.11	5	15	17	19.1	...
715	... ..	May 23	R	14	51	23.24	5	39	19	38.3	9.1
716	... ..	June 27	M	14	51	35.46	...	123	12	43.3	9.0
717	6991 Taylor ...	May 21	M	14	51	52.67	...	39	48	49.7	6.4
718	15001 O. A. N.	May 23	R	14	53	52.88	5	39	21	3.3	7.5
719	15023 O. A. N.	June 16	R	14	55	39.47	5	27	17	28.9	7.6
720	43 Bootis ψ ...	May 18	M	14	58	37.09	...	62	31	15.0	...
	... ..	" 28	R	58	37.04	...	...	31	13.7	...	...
	... ..	" 31	R	58	37.16	...	...	31	13.6	...	...
	... ..	June 7	R	58	37.05	...	...	31	14.6	...	...
	... ..	" 8	R	58	37.12	...	...	31	14.8	...	...
	... ..	" 15	R	58	37.02	...	...	31	13.9	...	...
	... ..	" 18	R	58	37.08	...	...	31	14.1	...	...
	... ..	July 8	M	58	37.09	...	...	31	14.6	...	...
721	7079 Taylor ...	June 27	M	15	3	19.58	...	123	7	14.8	6.7
722	15138 O. A. N.	May 25	R	15	4	7.39	...	43	0	6.3	9.2
723	24 Libræ ϵ^1 ...	May 19	M	15	4	28.20	...	100	16	28.8	...
	... ..	" 20	M	4	28.32	3	...	16	29.4	...	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
724	111 R. P. L. ...	May 21	M	15	5	45.19	3	5	31	23.7	..
725	27 Libræ β ..	Apl. 22	R	15	9	41.44	...	98	52	43.6	...
	... ..	June 10	M		9	41.49	..		52	44.6	...
	... ..	" 15	R		9	41.52	5		52	42.7	...
	... ..	" 16	R		9	41.45	..		52	43.3	...
	... ..	" 30	M		9	41.46	...		52	43.6	...
	... ..	July 4	M		9	41.32	...		52	43.5	...
	... ..	" 11	M		9	41.39	...		52	43.9	...
726	... ..	May 25	R	15	14	12.39	...	123	7	30.8	9.5
727	... ..	June 16	R	15	20	23.60	...	130	8	35.3	8.7
	... ..	" 27	M		20	23.57	5		8	34.3	8.8
	... ..	July 1	M		20	23.53	...		8	34.4	8.7
728	32 Libræ γ ...	June 17	R	15	20	35.48	...	106	14	22.2	...
729	... ..	May 25	R	15	21	40.06	5	129	25	58.8	7.5
730	XV 305 W. B. E. ...	July 9	M	15	21	58.56	...	101	15	29.5	8.9
	... ..	" 25	R		21	58.55	5		15	31.5	8.8
731	114 R. P. L. ...	Dec. 20	R	15	22	29.01	2	2	14	59.0	...
732	XV 429 W. B. E. ...	July 22	R	15	24	2.45	...	101	28	29.1	9.2
	... ..	" 25	R		24	2.60	4		28	30.8	9.5
733	7240 Taylor ...	May 13	M	15	24	24.18	...	130	1	28.8	7.5
734	3394 Radcliffe ...	June 18	R	15	25	3.61	5	41	49	0.2	8.0
735	28 Libræ γ ...	Apl. 22	R	15	27	55.18	6	104	30	0.5	...
	... ..	" 23	R		27	55.20	...		30	0.6	...
	... ..	June 16	R		27	55.37	4		19	59.9	...
	... ..	" 17	R		27	55.31	...		19	59.5	...
736	5 Corvæ Borealis α ...	June 3	R	15	28	55.75	...	62	49	23.1	...
	... ..	" 29	M		28	55.88	...		49	23.7	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
736	5 Corona Borealis a ...	June 30	M	15	28	55.82	...	62	40	32.9	...
	... ..	July 4	M		28	55.78	...		40	34.0	...
	... ..	" 8	M		28	55.82	...		40	34.2	...
737	... ..	June 4	R	15	29	12.53	5	119	40	28.0	9.8
738	... ..	May 25	R	15	30	9.95	5	129	33	27.5	9.0
739	25530 Lalande ...	June 18	R	15	31	50.66	...	47	25	19.7	9.5
740	XV 645 W. B. E. ..	June 17	R	15	34	22.72	...	102	19	14.3	...
	... ..	" 27	M		34	22.40	4		19	15.7	8.2
	... ..	" 29	M		34	22.52	4		19	18.6	8.1
741	XV 675 W. B. E. ..	June 7	R	15	35	56.53	5	102	41	26.2	9.3
	... ..	July 1	M		35	56.31	...		41	26.5	9.1
	... ..	" 4	M		35	56.45	3		41	27.2	9.3
742	24 Serpentina a ...	Apr. 23	R	15	37	34.26	...	83	8	38.6	...
	... ..	June 16	R		37	34.20	...		8	39.4	...
	... ..	" 30	M		37	34.13	...		8	39.3	...
	... ..	July 7	R		37	34.15	...		8	38.9	...
	... ..	" 8	M		37	34.18	...		8	39.7	...
	... ..	" 11	M		37	34.15	...		8	39.2	...
	... ..	" 22	R		37	34.20	...		8	38.9	...
743	... ..	May 25	R	15	41	26.70	...	62	3	16.3	9.2
	... ..	" 28	R		41	26.74	...		3	16.2	9.7
744	... ..	May 23	R	15	42	32.18	4	61	46	38.9	10.0
745	R Serpentina Var. 2 ...	July 1	M	15	44	25.44	5	71	27	6.7	7.4
746	3462 Radcliffe ...	June 18	R	15	46	25.61	...	47	1	30.6	8.0
747	29970 Lalande ...	July 23	R	15	47	57.96	5	70	40	3.7	7.8
748	29950 Lalande ...	May 26	R	15	48	54.38	...	104	25	44.3	...
	... ..	July 9	M		48	54.48	...		25	44.9	6.1
	... ..	" 11	M		48	54.25	...		25	44.8	6.1

Separate Results of Madras Meridian Circle Observations in 1864.

Numb. r.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1864.			No. of Wires	Mean Polar Distance, 1864.			Magnitude.
				h.	m.	s.		°	'	"	
719	16 Ursa Minoris 3 ...	June 4	R	15	48	50.52	5	11	47	18.8	...
		July 22	R		48	50.57	5		47	20.7	...
720	... ..	May 31	R	15	49	24.75	5	103	50	0.0	8.9
		July 2	M		49	24.78	...		50	0.4	9.0
		" 25	R		49	24.63	3		50	2.6	...
731	20054 Lalande ...	June 2	R	15	50	30.71	5	104	3	35.5	7.8
		" 3	R		50	30.60	5		3	35.6	8.9
		" 7	R		50	30.71	...		3	35.3	9.0
732	8 Scorpii β ¹ ...	Apr. 23	R	15	57	31.91	...	109	25	47.8	...
		May 20	M		57	31.90	...		25	49.5	...
		" 21	M		57	31.87	...		25	47.1	...
		June 27	M		57	31.96	...		25	49.1	...
		" 28	M		57	31.96	...		25	48.5	...
		July 4	M		57	31.91	...		25	49.2	...
		" 25	R		57	32.05	5		25	49.6	...
733	... ..	May 25	R	15	59	58.63	5	105	16	21.0	8.2
		" 28	R		59	58.57	5		16	22.7	8.5
		July 1	M		59	58.43	5		16	21.8	8.2
734	15281 O. A. S. ...	May 23	R	16	0	58.50	6	105	43	43.4	9.3
		" 31	R		0	58.49	6		43	43.4	9.3
		June 2	R		0	58.43	5		43	42.7	9.4
735	14 Scorpii γ ...	Apr. 23	R	16	4	5.58	4	199	6	15.5	...
		May 20	M		4	5.77	...		6	15.0	...
736	116 R. P. L. ... s. p.	Jan. 4	M	16	4	43.76	5	4	18	40.2	...
737	15412 O. A. S. ...	May 28	R	16	6	18.76	6	106	3	7.9	9.5
		June 3	R		6	18.47	...		3	7.8	9.5
		" 7	R		6	18.53	...		3	7.6	9.0
738	15418 O. A. S. ...	May 25	R	16	6	30.88	...	106	11	31.1	8.5
		" 31	R		6	30.90	...		11	30.5	8.8
		July 4	M		6	30.85	5		11	31.8	8.8

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1864.			No of Wires	Mean Polar Distance, 1864.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
759	1 Ophiuchi δ...	June 16	R	16	7	13.18	...	23	20	30.6	...
	... ..	" 27	M		7	13.17	...		20	30.3	...
	... ..	" 28	M		7	13.29	...		20	30.2	...
	... ..	" 29	M		7	13.24	...		20	30.6	...
	... ..	July 22	R		7	13.21	...		20	30.8	...
760	15544 O. A. S.	May 25	R	16	12	46.68	...	106	45	5.7	8.7
	... ..	" 23	R		12	46.76	5		45	6.8	8.7
	... ..	" 31	R		12	46.76	...		45	6.4	8.7
761	20 Scorpii σ	Apl. 23	R	16	12	55.43	...	115	15	17.0	...
	... ..	June 17	R		12	55.60	...		15	47.1	...
	... ..	" 18	R		12	55.47	...		15	48.0	...
762	15552 O. A. S.	July 1	M	16	13	13.89	3	107	22	1.0	9.2
763	... ..	June 16	R	16	15	46.22	...	128	7	41.2	8.9
764	21 Scorpii α (<i>Antares</i>)	Apl. 23	R	16	21	4.29	...	116	7	37.1	...
	... ..	June 7	R		21	4.35	...		7	36.7	...
	... ..	" 17	R		21	4.32	...		7	37.2	...
	... ..	" 18	R		21	4.31	...		7	36.2	...
	... ..	" 27	M		21	4.33	...		7	36.9	...
	... ..	" 28	M		21	4.30	...		7	36.7	...
	... ..	" 29	M		21	4.30	...		7	37.2	...
	... ..	" 30	M		21	4.31	...		7	37.3	...
	... ..	July 22	R		21	4.28	...		7	36.4	...
	... ..	" 23	R		21	4.42	...		7	37.0	...
765	30 Hercules γ Var. 5.	June 16	R	16	24	10.48	...	47	49	3.4	5.5
766	13 Ophiuchi 3	July 18	R	16	29	40.28	...	100	17	19.7	...
767	5784 Brisbane	May 25	R	16	30	54.60	5	150	30	26.0	9.5
768	40 Hercules 3	June 21	R	16	36	9.62	...	58	8	57.3	...
	... ..	July 1	M		36	9.53	...		8	57.2	...
	... ..	" 4	M		36	9.71	...		8	58.1	...
	... ..	" 11	M		36	9.65	...		8	58.3	...
	... ..	" 19	R		36	9.57	...		8	57.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

No.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1864.			No. of Wires.	Mean Polar Distance, 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
768	40 Hercules 5	July 23	R	16	36	9.57	..	58	8	56.7	...
	.. ..	" 25	R		36	9.53	..		8	57.0	...
769	.. ..	June 4	R	16	41	52.56	5	75	16	44.1	10.0
770	27 Ophiuchi ϵ	June 28	M	16	51	13.85	...	80	24	39.3	...
	.. ..	" 29	M		51	13.77	...		24	40.8	...
	.. ..	July 18	R		51	13.78	...		24	40.2	...
	.. ..	" 25	R		51	13.81	...		24	40.4	...
	.. ..	Aug. 5	M		51	13.85	...		24	39.4	...
	.. ..	" 8	M		51	13.80	...		24	40.6	...
	.. ..	" 13	M		51	13.85	...		24	39.1	...
771	10232 O. A. S.	July 22	R	16	53	57.53	5	110	14	43.5	9.8
772	10233 O. A. S.	July 11	M	16	53	58.62	...	110	23	35.0	8.0
773	.. ..	June 4	R	16	55	15.87	...	100	56	33.8	7.7
774	22 Uran Minoris ϵ <i>s.p.</i>	Feb. 9	M	17	0	1.71	5	7	44	43.4	..
	.. ..	June 16	R		0	1.59	5		44	39.4	..
	.. ..	July 18	R		0	1.54	5		44	40.8	..
	.. ..	Aug. 8	M		0	1.53	3		44	40.2	...
	.. ..	" 11	M		0	1.61	3		44	39.8	..
	 <i>s.p.</i>	Dec. 15	R		0	1.20	6		44	41.6	...
775	35 Ophiuchi η	May 21	M	17	2	34.87	..	105	33	9.1	...
	.. ..	June 18	R		2	34.86	4		33	11.5	...
776	.. ..	July 22	R	17	5	41.18	...	130	50	23.7	9.0
777	64 Hercules α Var. 1.	June 21	R	17	8	26.73	..	75	27	8.5	...
	.. ..	July 1	M		8	26.78	...		27	8.8	...
	.. ..	" 11	M		8	26.76	...		27	9.4	...
	.. ..	" 18	R		8	26.78	...		27	7.8	..
	.. ..	" 21	R		8	26.80	...		27	7.0	...
	.. ..	" 26	R		8	26.73	..		27	7.2	..
	.. ..	Aug. 5	M		8	26.72	..		27	9.0	..
	.. ..	" 12	M		8	26.83	..		27	8.7	..

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
778		June 29	M	17	0	1.79	...	121	4	16.2	8.2
779		July 22	R	17	11	37.45	...	130	27	39.3	9.8
780	8017 Taylor ...	May 21	M	17	13	21.31	3	114	45	54.2	...
		June 17	R		13	21.22	...		45	55.4	...
		Aug. 15	M		13	21.16	...		45	54.1	6.7
781	42 Ophiuchi θ ...	June 18	R	17	13	39.55	...	114	51	35.7	...
		July 21	R		13	39.40	5		51	37.1	...
		" 26	R		13	39.54	...		51	36.3	...
		Aug. 5	M		13	39.65	...		51	37.0	...
		" 13	M		13	39.41	...		51	36.0	...
782	44 Ophiuchi δ ...	Aug. 13	M	17	18	3.67	...	114	2	48.4	5.0
783	8 Arct... ..	June 17	R	17	18	49.75	...	150	33	54.6	...
		July 1	M		18	49.58	3		33	56.7	6.7
784		July 22	R	17	21	22.44	5	130	32	55.8	8.3
785		Aug. 15	M	17	21	22.60	5	130	50	57.0	8.4
786		July 11	M	17	28	25.03	...	125	14	39.7	8.7
787	55 Ophiuchi α ..	June 21	R	17	28	37.28	...	77	20	18.1	...
		July 1	M		28	37.21	...		20	18.6	...
		" 26	R		28	37.23	...		20	17.9	...
		Aug. 5	M		28	37.23	...		20	18.5	...
		" 8	M		28	37.27	...		20	19.1	...
788		July 22	R	17	30	22.89	...	130	56	24.1	8.9
789		July 22	R	17	34	34.46	5	126	15	0.4	9.3
790		July 22	R	17	39	16.04	5	127	17	24.4	9.8
791		July 18	R	17	39	43.84	...	127	14	36.4	8.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of (Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1904.			Magnitude.
				h.	m.	s.		°	'	"	
792	86 Hercules μ	July 1	M	17	41	8.23	...	62	11	62.5	...
	..	Aug. 12	M		41	8.16	...		11	62.2	...
793	31 Draconis δ^1 (1st)	June 18	R	17	44	22.18	...	17	47	60.0	6.6
794	..	Aug. 9	M	17	45	2.09	...	128	47	39.5	8.9
795	7501 Lacaille	Aug. 8	M	17	48	32.17	...	129	7	45.6	7.0
796	..	July 22	R	17	50	25.24	...	130	50	22.0	8.8
	..	" 25	R		50	25.27	5		50	23.5	9.0
	..	Aug. 5	M		50	25.08	6		50	22.4	8.4
797	7518 Lacaille	Aug. 15	M	17	52	43.11	3	149	12	14.6	7.0
798	33 Draconis γ	Aug. 12	M	17	53	26.01	...	38	29	39.1	...
799	8355 Taylor	Aug. 9	M	17	56	59.84	...	133	25	39.0	5.5
800	..	July 25	R	18	1	13.86	...	131	43	35.8	9.7
	..	Aug. 6	M		1	13.65	...		43	34.1	8.7
801	..	July 25	R	18	2	40.27	5	131	44	29.2	9.0
802	T Hercules Var. 4	Aug. 10	R	18	3	67.37	...	58	59	52.7	8.2
803	13 Sagittarii μ^1	Aug. 8	M	18	5	37.70	...	111	5	26.2	...
	..	" 9	M		5	37.76	...		5	27.7	...
	..	" 12	M		5	37.68	...		5	28.3	...
	..	" 15	M		5	37.75	...		5	28.6	...
804	15 Sagittarii	Aug. 13	M	18	7	6.02	...	110	45	54.7	5.0
805	8461 Taylor	Aug. 15	M	18	14	24.47	...	134	10	24.8	6.1
806	23 Ursa Minoris δ μ	Feb. 11	M	18	16	13.73	3	8	23	45.3	...
	..	" 15	M		16	13.32	3		23	44.3	...
	..	" 16	R		16	13.35	3		23	48.6	...
	..	Aug. 16	R		16	13.02	3		23	47.9	...
	..	Dec 15	R		16	13.63	3		23	47.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
807	21 Sagittarii ...	Aug. 13	M	18	17	14.94	...	110	36	40.7	5.0
808	8 ² Telescopii ...	July 18	R	18	21	58.12	5	135	50	44.8	6.7
	... ..	Aug. 16	M		21	58.25	5		50	47.2	6.3
809	... ..	July 25	R	18	22	51.47	5	135	15	54.9	9.0
810	θ Coronæ Australia ...	Aug. 20	R	18	23	47.14	...	132	24	22.3	6.0
811	3 Lyræ α (Vega) ...	Aug. 8	M	18	32	20.05	...	51	20	29.0	...
	... ..	" 9	M		32	19.95	...		20	29.6	...
	... ..	" 12	M		32	19.94	...		20	28.9	...
	... ..	" 15	M		32	19.95	...		20	29.4	...
812	R. Scuti Var. 1 ...	Aug. 22	R	18	40	13.20	...	95	50	53.3	6.0
813	7872 Lacaille ...	Aug. 20	R	18	42	20.14	5	136	45	1.7	6.0
814	7873 Lacaille ...	Aug. 20	R	18	42	53.19	4	136	44	39.6	7.0
815	10 Lyræ β Var. 1 ...	Aug. 23	R	18	45	3.46	...	56	47	36.4	...
	... ..	" 29	R		45	3.37	...		47	36.6	...
	... ..	Sep. 9	M		45	3.40	...		47	36.5	...
816	... ..	Aug. 26	R	18	46	54.04	...	137	44	56.1	9.7
817	37 Sagittarii 1' ...	July 18	R	18	49	36.78	...	111	16	55.7	...
818	13 Lyræ Var. 2 ...	Aug. 12	M	18	51	11.39	...	46	13	54.3	...
819	... ..	July 18	R	18	54	10.28	6	122	56	13.2	8.3
	... ..	Aug. 20	R		54	10.57	...		56	13.0	7.5
820	... ..	Aug. 16	R	18	57	17.47	5	111	21	9.2	9.9
	... ..	" 22	R		57	17.97	5		21	8.6	10.0
821	17 Aquilæ 3 ...	Aug. 9	M	18	59	9.49	...	76	20	11.5	...
	... ..	" 11	M		59	9.43	...		20	11.5	...
	... ..	" 20	R		59	9.46	...		20	11.2	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
821	17 Aquilæ 3	Aug. 31	R	18	59	9.37	5	76	20	12.2	...
	... ..	Sep. 2	M		59	9.54	...		20	12.0	...
	... ..	" 9	M		59	9.42	...		20	10.7	...
	... ..	" 10	M		59	9.44	...		20	12.5	...
822	... ..	Aug. 5	M	19	0	51.71	...	82	1	34.1	...
823	41 Sagittarii v	July 18	R	19	1	40.55	...	111	14	4.9	...
824	... ..	Aug. 24	R	19	3	6.08	5	139	22	42.7	9.0
825	... ..	July 11	M	19	3	13.46	...	122	51	5.7	8.0
	... ..	Aug. 8	M		3	13.51	...		51	6.4	8.0
826	T Sagittarii Var. 3	Aug. 8	M	19	8	23.15	...	107	12	22.4	7.0
	... ..	" 11	M		8	23.18	...		12	24.1	7.0
	... ..	" 12	M		8	23.23	...		12	22.2	8.0
	... ..	" 13	M		8	23.15	5		12	22.4	8.1
827	R Sagittarii Var. 1	Aug. 26	R	19	8	42.57	5	109	27	45.4	10.0
828	... ..	Aug. 23	R	19	9	6.37	5	109	32	47.9	9.5
829	43 Sagittarii d	Aug. 15	M	19	9	40.56	...	109	11	30.8	5.0
830	... ..	Sep. 12	M	19	10	0.19	6	107	9	40.9	8.1
831	25 Aquilæ α	Aug. 9	M	19	11	25.79	...	78	38	50.7	...
	... ..	" 16	R		11	25.84	...		38	51.3	...
	... ..	" 29	R		11	25.96	5		38	51.0	...
	... ..	" 31	R		11	25.92	...		38	50.8	...
832	44 Sagittarii ρ ¹	Aug. 15	M	19	13	46.80	...	108	6	1.0	...
833	... ..	June 26	R	19	16	34.39	...	129	52	46.3	8.0
	... ..	Sep 13	M		16	34.32	...		52	46.7	8.2
	... ..	" 14	M		16	34.45	...		52	46.9	8.3
834	30 Aquilæ δ	Aug. 13	M	19	18	38.37	...	87	9	14.1	...
	... ..	" 16	R		18	38.39	...		9	13.9	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
834	30 Aquilæ δ ...	Aug. 22	R	19	18	38.30	..	87	9	16.9	...
	... ..	" 29	R		18	38.34	..		9	13.6	...
	... ..	Sep. 2	M		18	38.32	..		9	14.2	...
	... ..	" 5	M		18	38.38	...		9	15.1	...
	... ..	Aug. 15	M		18	38.46	...		9	13.7	...
835	52 Sagittari h ² ..	Aug. 13	M	19	28	25.68	...	115	10	50.1	...
	... ..	" 15	M		28	25.54	...		10	48.7	...
	... ..	" 16	M		28	25.58	...		10	49.6	...
	... ..	Sep. 9	M		28	25.71	4		10	50.3	...
	... ..	" 14	M		28	25.69	...		10	50.6	...
836	8173 Lacaille ...	Aug. 23	R	19	31	36.73	..	143	15	31.5	8.8
837	R Cygni Var. 3 ...	Aug. 20	R	19	33	12.38	..	40	4	50.2	9.9
	... ..	" 22	R		33	12.21	5		4	51.2	9.5
838	... ..	Aug. 24	R	19	34	23.47	...	127	17	3.4	9.0
839	50 Aquilæ γ ...	Aug. 22	R	19	39	47.48	...	79	42	57.5	...
	... ..	" 24	R		39	47.45	...		42	58.0	...
	... ..	" 26	R		39	47.54	..		42	56.8	...
840	S Vulpeculæ Var. 3...	Aug. 20	R	19	42	49.21	...	63	3	1.5	9.6
	... ..	" 23	R		42	49.31	5		3	2.0	...
841	53 Aquilæ α (Altair)...	Aug. 17	M	19	44	8.77	...	81	29	19.0	...
	... ..	" 31	R		44	8.80	...		29	17.3	...
842	χ Cygni Var. 2 ...	Aug. 8	M	19	45	20.34	...	57	55	43.3	6.0
	... ..	" 9	M		45	20.38	...		55	42.6	6.0
843	55 Aquilæ η Var. 1 ..	Aug. 5	M	19	45	32.45	..	80	20	27.9	...
844	60 Aquilæ β ..	Aug. 17	M	19	48	37.94	...	83	55	51.8	...
	... ..	" 20	R		48	37.85	...		55	50.1	...
	... ..	Sep. 2	M		48	37.79	...		55	50.7	...
	... ..	" 10	M		48	37.77	...		55	51.1	...
845	... ..	Sep. 14	M	19	49	33.81	...	145	56	51.6	8.5

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
846	... ..	July 25	R	19	53	0.42	5	147	10	53.4	9.0
	... ..	Sep. 15	M		53	0.30	5		10	52.9	9.0
847	... ..	Oct. 1	M	19	55	35.36	3	151	51	39.1	9.1
848	9208 Taylor ...	Aug. 8	M	19	55	41.71	3	122	26	5.9	5.2
	... ..	" 13	M		55	41.78	...		26	6.0	5.3
849	λ Ursæ Minoris <i>s.p.</i>	Feb. 19	R	20	0	6.69	3	1	5	54.7	...
	 <i>s.p.</i>	" 26	R		0	7.23	1		5	54.9	...
	... ..	Aug. 23	R		0	6.86	7		5	54.9	...
	... ..	Sep. 29	R		0	7.34	3		5	53.8	...
850	20046 O. A. N. ...	July 18	R	20	2	39.55	5	32	23	32.3	9.2
851	R Capricorni Var. 1...	Aug. 24	R	20	3	40.42	6	104	40	4.6	9.1
852	S Aquilæ Var. 4 ...	Aug. 23	R	20	5	21.94	5	74	46	56.6	9.1
	... ..	Sep. 13	M		5	21.81	...		46	56.1	9.0
853	... ..	Sep. 10	M	20	7	41.31	...	81	22	25.8	9.0
854	20356 O. A. S. ...	Oct. 1	M	20	8	22.17	...	110	26	8.1	8.2
855	... ..	Sep. 14	M	20	10	28.82	...	149	9	1.6	7.0
856	6 Capricorni α^1 ...	July 18	R	20	10	30.28	...	102	57	49.9	...
	... ..	Aug. 15	M		10	30.27	...		57	50.2	...
	... ..	" 24	R		10	30.31	...		57	50.4	...
	... ..	Sep. 5	M		10	30.32	...		57	50.8	...
	... ..	" 9	M		10	30.12	...		57	49.4	...
	... ..	" 13	M		10	30.31	...		57	50.0	...
	... ..	" 13	M		10	30.28	...		57	50.2	...
857	39045 Lalande ...	Aug. 26	R	20	12	5.00	...	50	3	17.3	6.3
	... ..	Sep. 15	M		12	4.96	...		3	15.5	6.4
858	α Pavonis ...	Aug. 24	R	20	14	51.56	...	147	10	2.7	...
	... ..	Sep. 20	R		14	52.08	...		10	2.0	...
	... ..	" 29	R		14	52.02	...		10	1.6	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
859	8441 Lacaille ...	Aug. 17	M	20	18	13.03	...	121	6	59.1	8.2
	... ..	Sep. 14	M		18	13.17	...		6	58.7	8.3
860	11 Capricorni ρ ...	July 18	R	20	21	5.98	...	108	15	37.6	...
	... ..	Aug. 22	R		21	5.93	...		15	37.2	...
	... ..	" 24	R		21	5.88	...		15	38.1	...
	... ..	Sep. 5	M		21	5.94	...		15	38.9	...
	... ..	" 10	M		21	5.89	...		15	38.8	...
	... ..	" 13	M		21	5.86	...		15	39.0	...
	... ..	Oct. 1	M		21	5.86	...		15	38.2	...
861	39525 Lalande ...	Sep. 19	R	20	24	56.46	5	86	2	29.0	7.0
	... ..	" 20	R		24	55.96	...		2	29.3	...
862	... ..	Aug. 9	M	20	27	12.99	3	121	5	53.5	8.2
	... ..	Sep. 14	M		27	13.15	5		5	53.9	8.0
	... ..	Oct. 4	M		27	13.10	4		5	54.5	8.8
863	... ..	Aug. 18	R	20	27	50.62	5	143	16	24.5	8.9
864	24 Cephei (<i>Hev.</i>)... <i>s.p.</i>	Mar. 3	M	20	28	6.61	2	1	17	7.1	8.9
	 <i>s.p.</i>	" 19	R		28	5.52	2		17	6.5	...
865	143 R. P. L. ... <i>s.p.</i>	Mar. 16	R	20	29	42.32	5	5	18	28.0	...
	... ..	Sep. 13	M		29	42.13	3		18	29.9	...
866	... ..	Sep. 19	R	20	29	45.35	...	143	22	1.4	8.5
867	... ..	Oct. 1	M	20	30	52.50	5	149	55	29.2	8.0
	... ..	" 8	M		30	52.32	5		55	23.1	8.0
868	14 Capricorni γ^b ...	Aug. 16	R	20	31	39.85	...	105	25	45.7	...
869	8 Capricorni Var. 2... ..	Aug. 19	R	20	33	57.30	...	109	32	27.6	8.8
	"	" 22	R		33	57.26	...		32	21.2	9.2
870	... ..	Oct. 3	M	20	36	32.04	5	148	23	23.4	8.7
871	60 Cygni α (<i>Deneb</i>)	Aug. 11	M	20	36	47.83	...	45	12	16.9	...
	... ..	Sep. 5	M		36	47.54	...		12	16.9	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				A.	m.	s.		°	'	"	
871	50 Cygni α (Deneb) ...	Sep. 12	M	20	36	47.59	...	45	12	16.7	...
	... ..	" 20	R		36	47.77	...		12	15.9	...
	... ..	" 22	R		36	47.65	...		12	15.7	...
872	... ..	Aug. 26	R	20	38	8.49	4	143	3	17.3	9.0
873	53 Aquarii Var. c ...	Aug. 15	M	20	40	18.58	...	90	59	29.9	...
	... ..	" 16	R		40	18.62	...		59	29.0	...
874	... ..	Aug. 23	R	20	41	8.55	4	105	18	21.6	10.5
875	T Aquarii Var. 4 ...	Aug. 19	R	20	42	45.59	...	96	38	58.5	9.0
	... ..	" 22	R		42	45.52	5		38	58.2	9.0
	... ..	Sep. 10	R		42	45.60	4		38	57.9	8.2
	... ..	Oct. 5	M		42	45.60	...		38	57.6	8.4
876	5571 Lacaille ...	Sep. 10	M	20	42	53.11	5	150	12	54.5	7.9
	... ..	Oct. 7	M		42	53.12	...		12	57.4	8.0
877	9633 Taylor ...	Aug. 17	M	20	44	34.11	...	101	56	47.5	7.1
	... ..	Oct. 6	M		44	34.26	...		56	46.8	7.3
878	6 Aquarii α ...	Sep. 12	M	20	45	19.27	...	90	29	29.4	...
	... ..	" 13	M		45	18.94	...		29	28.9	...
879	... ..	Aug. 24	R	20	48	36.01	...	149	1	17.4	8.8
880	32 Vulpeculæ ...	Aug. 11	M	20	48	45.67	4	62	27	29.7	...
	... ..	" 20	R		48	45.88	...		27	28.5	...
	... ..	" 23	R		48	45.73	...		27	28.8	...
	... ..	" 26	R		48	45.79	...		27	30.3	...
	... ..	Sep. 19	R		48	45.88	...		27	29.3	...
	... ..	" 22	R		48	45.85	...		27	29.7	...
	... ..	" 24	R		48	45.79	...		27	28.0	...
	... ..	Oct. 8	M		48	45.91	...		27	31.5	...
	... ..	" 13	M		48	45.84	...		27	29.7	...
881	... ..	Sep. 14	M	20	50	40.81	...	148	45	51.9	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
882	8635 Lacaille	Aug. 22	R	20	52	18.68	...	126	35	3.4	7.5
	... ..	Sep. 20	R		52	18.86	...		35	1.7	7.0
	... ..	Oct. 7	M		52	18.95	5		35	3.3	7.7
883	23 Capricorni θ	Oct. 8	M	20	58	18.93	5	107	46	16.1	.
884	R Vulpeculæ Var. 3...	Aug. 24	R	20	58	20.21	...	66	42	56.7	8.5
	... ..	Sep. 10	M		58	20.29	...		42	56.5	8.5
885	... ..	Oct. 1	M	20	58	35.34	3	148	52	36.7	9.2
886	9772 Taylor	Sep. 14	M	21	0	27.23	3	145	7	17.3	7.5
	... ..	" 26	R		0	27.30	...		7	15.9	8.7
887	61 Cygni (1st)	Aug. 23	R	21	0	48.13	...	15	55	4.5	...
	... ..	" 26	R		0	48.23	5		55	4.3	...
	... ..	Sep. 20	R		0	48.14	...		55	4.0	...
888	13 Aquarii ν...	Sep. 12	M	21	2	10.86	...	101	55	14.0	...
	... ..	" 13	M		2	10.84	...		55	14.0	...
889	... ..	Sep. 19	R	21	2	54.39	5	145	6	44.8	9.5
	... ..	" 26	R		2	54.52	.		6	44.5	9.7
890	8712 Lacaille	Sep. 27	R	21	4	11.07	...	146	48	32.8	8.5
891	64 Cygni 5	Aug. 20	R	21	7	8.85	...	60	19	47.3	...
	... ..	" 22	R		7	8.91	...		19	47.2	...
	... ..	" 23	R		7	8.93	...		19	46.9	...
	... ..	" 26	R		7	8.89	...		19	47.5	...
	... ..	Sep. 20	R		7	8.96	...		19	46.8	...
	... ..	" 22	R		7	8.85	...		19	47.6	...
	... ..	" 24	R		7	8.81	...		19	48.3	...
	... ..	Oct. 1	M		7	8.92	...		19	46.4	...
	... ..	" 3	M		7	8.91	...		19	47.6	...
892	T. Capricorni Var. 3	Aug. 16	R	21	14	25.67	...	105	40	11.3	9.0
	... ..	" 26	R		14	25.67	5		40	11.2	9.2
	... ..	Sep. 26	R		14	25.71	...		40	11.9	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitudes.
				h.	m.	s.		°	'	"	
893	5 Cepheia (Alderamin)	Aug. 23	R	21	15	19.82	5	27	39	24.4	...
		Sep. 14	M		15	20.01	5		39	25.6	...
		" 20	R		15	19.95	...		39	24.6	...
894	9931 Taylor	Sep. 15	M	21	18	41.93	...	142	53	23.2	6.2
		" 28	R		18	41.77	4		53	23.6	7.0
		Oct. 1	M		18	41.81	...		53	22.6	6.8
895		Oct. 7	M	21	20	5.57	5	150	47	50.8	8.2
896	22 Aquarii β ...	Aug. 16	R	21	24	23.77	...	96	10	5.2	...
		" 17	M		24	23.82	...		10	4.7	...
		" 18	R		24	23.77	...		10	4.6	...
		" 23	R		24	23.80	...		10	4.6	...
		" 24	R		24	23.79	...		10	4.4	...
		" 26	R		24	23.80	...		10	4.7	...
		Sep. 12	M		24	23.83	...		10	5.0	...
		" 15	M		24	23.88	...		10	4.5	...
		" 22	R		24	23.82	...		10	4.7	...
		" 24	R		24	23.86	...		10	4.5	...
		Oct. 3	M		22	23.81	...		10	5.0	...
		" 4	M		24	23.77	...		10	6.0	...
		" 5	M		24	23.87	...		10	5.3	...
		" 6	M		24	23.80	...		10	3.7	...
897		Sep. 14	M	21	25	49.17	...	140	23	25.6	7.9
898	8 Cephei β	Aug. 13	M	21	26	53.98	5	20	2	9.4	...
		Sep. 20	R		26	53.90	5		2	9.0	...
		" 29	R		26	53.74	...		2	8.9	...
900		Sep. 27	R	21	27	4.39	...	132	38	19.9	9.5
900		Sep. 28	R	21	28	50.12	4	134	4	22.2	9.3
901		Sep. 28	R	21	29	29.13	4	134	2	29.7	9.0
		Oct. 8	M		29	29.33	...		2	30.8	9.0
902		Oct. 7	M	21	29	53.40	...	98	25	23.9	9.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
903	22 Aquarii 1 ...	Aug. 16	R	21	30	30.59	...	98	27	45.1	...
	... ..	" 17	M		30	30.49	...		27	44.8	...
	... ..	Oct. 11	M		30	30.63	...		27	44.4	...
904	10032 Taylor ...	Sep. 5	M	21	30	41.50	...	142	58	15.0	6.4
905	10065 Taylor ...	Sep. 13	M	21	34	27.98	...	145	7	8.3	6.4
906	... ..	Sep. 27	R	21	34	41.63	...	134	0	27.1	9.2
	... ..	Oct. 1	M		34	41.44	...		0	27.2	9.0
907	8 Pegasi e ...	Sep. 14	M	21	37	30.19	...	80	44	51.2	...
	... ..	" 15	M		37	30.34	...		44	48.5	...
	... ..	" 19	R		37	30.39	5		44	50.2	...
	... ..	" 20	R		37	30.43	...		44	49.7	...
	... ..	" 26	R		37	30.38	...		44	50.0	...
	... ..	" 29	R		37	30.36	...		44	50.2	...
	... ..	Oct. 3	M		37	30.25	...		44	51.3	...
	... ..	" 4	M		37	30.37	...		44	50.0	...
	... ..	" 5	M		37	30.20	...		44	50.0	...
	... ..	" 6	M		37	30.40	5		44	48.5	...
908	10126 Taylor ...	Sep. 28	R	21	40	59.24	...	137	16	24.3	7.0
909	XXI 975 W. B. E. ...	Aug. 19	R	21	41	9.89	...	97	19	43.0	9.0
	... ..	" 26	R		41	9.96	5		19	43.9	8.9
	... ..	Sep. 5	M		41	9.79	...		19	44.9	9.0
910	... ..	Sep. 27	R	21	42	52.87	...	132	31	25.7	9.0
	... ..	Oct. 7	M		42	52.98	5		31	26.2	9.1
911	16 Pegasi ...	Aug. 18	R	21	46	52.51	...	64	42	51.0	...
	... ..	Sep. 12	M		46	52.51	...		42	50.7	...
	... ..	" 19	R		46	52.48	...		42	49.0	...
	... ..	" 20	R		46	52.55	...		42	50.0	...
	... ..	" 26	R		46	52.41	...		42	50.3	...
	... ..	" 29	R		46	52.52	...		42	50.2	...
	... ..	Oct. 4	M		46	52.40	...		42	51.8	...
	... ..	" 5	M		46	52.45	...		42	51.3	...
	... ..	" 6	M		46	52.48	...		42	50.8	...

Separate Results of Mural Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension, 1864.			No. of Wires.	Mean Polar Distance, 1864.			Magnitude.
				h.	m.	s.		°	'	"	
912	8958 Lacaille	Sep. 28	R	21	47	12.72	...	135	53	16.0	7.5
		Oct. 3	M		47	12.87	...		53	20.0	7.6
913	...	Sep. 27	R	21	47	34.89	...	133	12	29.7	9.2
		Oct. 7	M		47	34.78	...		12	30.4	9.3
914	...	Sep. 28	R	21	52	46.60	...	136	38	12.8	9.7
915	α^1 Indi	Nov. 8	M	21	56	15.98	...	150	17	30.7	6.5
916	31 Aquarii	Sep. 5	M	21	56	16.50	...	92	48	38.0	...
917	32 Aquarii	Sep. 12	M	21	57	47.71	...	91	33	47.8	6.5
	...	Oct. 5	M		57	47.54	...		33	47.0	6.6
	...	" 6	M		57	47.48	...		33	46.6	6.7
918	...	Sep. 28	R	21	58	11.83	...	136	2	34.0	7.7
		Oct. 7	M		58	11.98	3		2	33.6	8.1
919	34 Aquarii	Aug. 19	R	21	58	47.83	...	90	58	46.8	...
	...	Sep. 10	M		58	47.77	...		58	45.9	...
	...	" 13	M		58	47.76	...		58	45.8	...
	...	" 26	R		58	47.87	...		58	46.6	...
	...	" 29	R		58	47.80	...		58	45.6	...
	...	Oct. 1	M		58	47.69	...		58	46.1	...
	...	" 8	M		58	47.77	...		58	46.2	...
	...	" 13	M		58	47.70	...		58	46.4	...
	...	" 14	M		58	47.75	...		58	46.1	...
	...	Nov. 10	M		58	47.81	...		58	47.4	...
920	α Gruis	Sep. 29	R	21	59	38.79	...	137	37	5.5	...
921	...	Sep. 27	R	22	3	19.55	5	101	8	54.2	9.5
922	XXII 93 W. R. E.	Aug. 19	R	22	6	21.86	...	90	25	48.5	8.0
	...	" 26	R		6	21.82	5		25	46.2	8.0
	...	Oct. 4	M		6	21.88	...		25	47.8	8.0
923	...	Oct. 6	M	22	9	5.55	5	98	22	7.4	...
		" 15	M		9	5.45	...		22	6.8	8.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer	Mean Right Ascension 1864			No. of Wires	Mean Polar Distance 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
924	...	Oct. 7	M	22	9	7.81	5	143	27	23.2	9.0
925	43 Aquarii θ	Sep. 13	M	22	9	39.27	...	98	27	33.5	...
	...	" 27	R		9	39.28	...		27	34.3	...
	...	" 29	R		9	39.24	...		27	33.7	...
	...	" 29	R		9	39.27	...		27	33.0	...
	...	Oct. 5	M		9	39.35	...		27	33.7	...
	...	" 8	M		9	39.28	...		27	34.4	...
	...	" 11	M		9	39.25	...		27	34.5	...
	...	" 13	M		9	39.31	...		27	34.2	...
	...	" 14	M		9	39.30	...		27	34.3	...
	...	Nov. 8	M		9	39.31	...		27	33.6	...
926	48 Aquarii γ	Oct. 11	M	22	14	37.97	...	92	4	19.1	...
	...	Nov. 3	M		14	37.94	4		4	18.8	...
	...	" 8	M		14	37.81	...		4	18.4	...
927	...	Aug. 19	R	22	15	20.79	...	82	17	25.4	8.6
	...	Sep. 12	M		15	20.80	...		17	26.4	9.0
	...	Oct. 4	M		15	20.80	...		17	26.5	9.1
928	...	Sep. 28	R	22	16	51.19	...	135	58	25.0	9.6
	...	Oct. 1	M		16	51.22	...		58	25.4	9.1
929	55 Aquarii δ	Aug. 17	M	22	21	49.53	...	90	42	51.9	5.7
	...	Oct. 6	M		21	49.72	...		42	51.8	6.6
	...	" 13	M		21	49.54	...		42	52.2	6.0
930	57 Aquarii σ	Sep. 13	M	22	23	26.76	...	101	22	23.2	...
931	150 R. P. 1.	Mar. 1	M	22	23	38.70	3	4	34	41.8	...
	...	" 5	M		23	39.28	3		34	42.1	...
	...	" 9	M		23	38.43	2		34	41.1	...
	...	" 14	M		23	38.04	3		34	43.4	...
	...	Apr. 15	M		23	38.57	5		34	41.7	...
	...	" 12	M		23	38.06	3		34	42.0	...
	...	Sept. 26	R		23	38.44	5		34	42.4	...
932	27 Cephei δ Var. 1	Oct. 5	M	22	24	7.58	...	32	16	51.0	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
933		Sep. 28	R	22	24	17.02	...	135	42	9.4	9.2
934		Oct. 7	M	22	24	39.74	...	146	50	35.2	9.7
935		Oct. 1	M	22	25	51.58	5	141	30	13.4	8.2
936	62 Aquarii ♀	Aug. 17	M	22	28	21.85	...	90	49	3.5	...
		Sep. 27	R		28	21.99	...		49	4.3	...
		" 28	R		28	22.04	...		49	3.6	...
		Oct. 11	M		28	22.03	...		49	4.2	...
		" 14	M		28	21.85	...		49	4.4	...
		" 15	M		28	21.96	...		49	4.8	...
		" 21	R		28	21.96	...		49	3.2	...
		Nov. 3	M		28	22.04	...		49	3.3	...
		" 10	M		28	22.01	...		49	5.1	...
937	9188 Lacaille	Oct. 24	R	22	29	53.61	...	130	33	42.5	7.0
		Nov. 2	M		29	53.44	5		33	43.0	7.0
938	10477 Taylor	Oct. 4	M	22	32	7.28	4	148	7	50.0	6.3
		" 13	M		32	7.21	...		7	50.0	6.1
939	42 Pegasi ♀	Sep. 20	R	22	34	40.83	...	79	52	40.3	...
		" 27	R		34	40.70	...		52	39.7	...
		" 28	R		34	40.71	...		52	39.8	...
		Oct. 7	M		34	40.78	...		52	40.2	...
		" 21	R		34	40.70	...		52	39.5	...
		...	...	...	...	...	...	...	...	...	...
940		Oct. 24	R	23	36	30.48	...	130	26	57.0	8.6
		" 25	R		36	30.52	...		26	56.5	9.0
941	9226 Lacaille	Sep. 22	R	22	37	39.00	...	145	46	40.1	7.0
		Oct. 8	M		37	39.25	3		46	39.5	6.6
		Nov. 3	M		37	38.98	4		46	40.3	6.7
942	XXII 844 W. B. E.	Oct. 5	M	22	40	34.18	...	87	48	41.2	9.0
		" 6	M		40	34.00	...		48	41.0	9.0
943		Nov. 2	M	22	40	51.93	...	142	38	2.0	8.6
		" 4	M		40	51.68	5		38	3.1	8.7

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				h.	m.	s.		°	'	"	
944	...	Oct. 22	R	22	44	41.40	...	130	1	17.1	8.0
	...	" 24	R		41	41.54	...		1	17.0	8.0
945	...	Oct. 7	M	22	44	43.81	5	145	23	2.5	10.2
946	...	Sep. 12	M	22	44	50.43	6	148	31	33.1	8.2
	...	Oct. 4	M		44	50.42	3		31	32.9	...
947	...	Nov. 8	M	22	48	3.87	...	152	55	12.3	9.0
948	...	Oct. 27	M	22	40	13.19	...	135	27	51.4	9.0
	...	Nov. 7	M		49	13.11	...		27	52.2	8.9
949	S Aquarii Var. 2	Sep. 22	R	22	49	40.09	5	111	4	1.0	...
950	2 Pis. Aust. α (Fomalhaut)	Oct. 11	M	22	50	7.71	...	120	20	33.7	...
	...	" 15	M		50	7.74	...		20	32.9	...
	...	" 21	R		50	7.67	...		20	32.4	...
	...	" 25	R		50	7.79	...		20	32.1	...
	...	Nov. 4	M		50	7.81	...		20	33.0	...
	...	" 6	M		50	7.74	...		20	32.4	...
	...	" 10	M		50	7.77	5		20	33.1	...
951	...	Sep. 13	M	22	50	19.32	...	111	0	5.9	7.1
	...	Oct. 8	M		50	19.47	...		0	5.5	7.4
952	...	Oct. 22	R	22	51	26.05	...	151	33	16.0	8.8
	...	" 24	R		51	26.19	...		33	15.0	9.0
953	9353 Lacaille	Oct. 4	M	22	56	36.00	...	144	41	28.0	5.9
954	...	Oct. 25	R	22	57	11.27	...	149	37	50.8	8.9
955	53 Peg. β Var. 1 (Schweat)	Oct. 5	M	22	57	11.01	3	62	30	16.9	...
956	54 Pegasi α (Markab)	Sep. 27	R	22	57	59.20	...	75	31	31.5	...
	...	" 28	R		57	59.16	...		31	34.3	...
	...	Oct. 7	M		57	59.16	...		31	35.5	...
	...	" 31	R		57	59.21	...		31	33.9	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation	Observer.	Mean Right Ascension, 1864.			No. of Wires.	Mean Polar Distance, 1864.			Magnitude.
				h.	m.	s.		"	"	"	
957	...	Oct. 24	R	22	50	20 04	...	150	22	5.8	9.3
	...	Nov. 7	M		50	19 00	...		22	5.3	8.0
958	9372 Lacaille	Oct. 15	M	23	0	22 68	...	150	28	13.3	8.0
	...	" 27	R		0	22 73	...		28	12.0	8.0
959	9377 Lacaille	Sep. 14	M	23	2	12 23	5	151	18	4.9	6.5
	...	Oct. 8	M		2	12 46	5		18	3.7	6.7
960	...	Sep. 27	R	23	4	18 57	...	130	40	14.1	9.5
	...	Oct. 22	R		4	18 60	...		40	16.0	9.5
961	9394 Lacaille	Oct. 25	R	23	5	9 82	...	145	50	37.4	8.2
	...	" 26	R		5	9 78	...		50	37.8	8.2
	...	Nov. 3	M		5	9 67	3		50	38.3	8.0
962	6 Piscium γ	Sep. 15	M	23	10	6 50	...	87	27	36.7	...
	...	" 16	R		10	6 55	...		27	36.8	...
	...	Oct. 8	M		10	6 02	...		27	38.8	...
	...	" 31	R		10	6 02	...		27	38.1	...
963	...	Oct. 24	R	23	11	5 52	...	151	15	41.8	9.8
964	...	Oct. 27	R	23	11	6 18	5	127	25	34.9	9.3
965	...	Nov. 12	M	23	11	18 58	...	136	54	21.5	8.6
966	...	Sep. 22	R	23	12	7 56	...	137	3	64.3	8.0
967	...	Oct. 15	M	23	12	12 85	5	127	24	50.8	8.2
	...	" 27	R		12	13 29	4		24	50.7	8.3
968	96 Aquarii	Sep. 9	M	23	12	20 02	...	95	52	2.5	5.5
969	...	Oct. 22	R	23	15	17 22	...	130	40	14.7	8.7
	...	" 25	R		15	17 34	...		40	14.8	8.7
	...	" 26	R		15	17 13	5		46	15.6	8.7
	...	" 28	R		15	17 29	4		46	15.2	8.0

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
970	... ..	Oct. 24	R	23	15	41.65	5	130	39	46.9	9.8
971	... ..	Oct. 26	R	23	19	42.21	5	151	38	3.9	...
972	8 Piscium α ...	Aug. 19	R	23	19	57.61	...	89	29	20.2	...
	... ..	Sep. 16	R		19	57.60	...		29	20.8	...
	... ..	Oct. 13	M		19	57.58	...		29	20.6	...
	... ..	" 27	R		19	57.63	...		29	19.3	...
	... ..	" 31	R		19	57.65	...		29	19.5	...
	... ..	Nov. 2	M		19	57.60	...		29	20.4	...
	... ..	" 4	M		19	57.63	...		29	20.1	...
	... ..	" 5	M		19	57.67	5		29	19.0	...
973	... ..	Sep. 20	R	23	23	37.20	5	148	57	35.8	8.7
	... ..	Nov. 3	M		23	37.18	...		57	35.4	8.6
974	... ..	Oct. 24	R	23	25	29.85	5	129	51	59.2	10.0
	... ..	" 25	R	23	25	29.90	...		51	59.7	9.8
975	10804 Taylor ...	Oct. 4	M	23	27	29.64	...	147	34	37.6	6.7
976	... ..	Sep. 22	R	23	27	45.91	...	148	14	44.8	8.7
	... ..	Oct. 15	M		27	45.65	...		14	47.7	8.0
977	158 R. P. L. ... <i>s.p.</i>	Mar. 23	R	23	27	50.24	5	3	26	34.6	...
	 <i>s.p.</i>	31	R		27	49.68	3		26	33.3	...
	 <i>s.p.</i>	May 17	R		27	50.02	5		26	34.2	...
	... ..	Oct. 3	M		27	50.28	2		26	35.0	...
	... ..	Nov. 5	M		27	49.26	3		26	35.5	...
978	... ..	Oct. 26	R	23	29	49.60	6	148	55	19.7	8.0
	... ..	Nov. 7	M		29	49.28	5		55	16.0	8.1
979	... ..	Oct. 26	R	23	30	21.60	...	148	56	42.9	8.3
980	17 Piscium : ...	Aug. 10	R	23	32	57.35	...	85	6	39.1	...
	... ..	Oct. 6	M		32	57.33	...		6	38.1	...
	... ..	" 7	M		32	57.31	...		6	38.3	...
	... ..	" 13	M		32	57.35	...		6	39.1	...

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires.	Mean Polar Distance. 1864.			Magnitude.
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
980	17 Piscium	Oct. 27	R	23	32	57.30	...	86	6	39.8	...
	...	Nov. 2	M		32	57.33	...		6	39.5	...
	...	" 8	M		32	57.86	...		6	38.9	...
981	35 Cephei γ	Sep. 20	R	23	33	47.05	...	13	7	36.8	...
	...	Oct. 24	R		33	47.74	...		7	39.9	...
	...	" 31	R		33	47.79	...		7	36.0	...
982	...	Oct. 25	R	23	34	20.29	...	147	27	26.3	9.2
983	...	Nov. 10	M	23	35	11.20	...	148	42	58.3	8.0
984	...	Sep. 20	R	23	36	46.94	5	106	2	18.9	9.5
	...	Oct. 15	M		36	46.55	...		2	18.6	8.9
985	9583 Lacaille	Oct. 4	M	23	38	50.58	...	128	43	54.3	8.4
	...	" 25	R		38	50.59	...		43	52.9	8.0
986	...	Oct. 25	R	23	41	4.67	...	128	46	38.4	9.7
987	3 Sculptoris	Oct. 7	M	23	41	50.33	...	118	52	57.5	...
	...	" 8	M		41	50.17	...		52	57.4	...
	...	" 22	R		41	50.04	...		52	56.8	...
	...	" 26	R		41	50.27	...		52	56.6	...
	...	" 27	R		41	50.23	...		52	57.1	...
	...	" 28	R		41	50.28	...		52	55.3	...
	...	Nov. 2	M		41	50.21	...		52	57.5	...
	...	" 3	M		41	50.15	...		52	56.4	...
	...	" 4	M		41	50.19	...		53	57.3	...
	...	" 5	M		41	50.24	...		52	56.3	...
	...	" 8	M		41	50.20	...		52	56.0	...
988	...	Sep. 15	M	23	41	58.37	...	142	4	25.9	8.5
989	...	Nov. 7	M	23	42	41.88	...	150	54	3.2	9.4
990	...	Oct. 22	R	23	47	43.56	...	128	50	58.3	9.0
	...	" 24	R		47	43.76	...		50	58.5	9.8

Separate Results of Madras Meridian Circle Observations in 1864.

Number.	Star.	Date of Observation.	Observer.	Mean Right Ascension. 1864.			No. of Wires	Mean Polar Distance. 1864.			Magnitude
				<i>h.</i>	<i>m.</i>	<i>s.</i>		<i>°</i>	<i>'</i>	<i>"</i>	
991	9641 Lacaille ...	Oct. 28	R	23	48	2 04	5	128	7	14.7	7.8
992	... ..	Nov. 12	M	23	40	57.25	...	148	53	24.9	8.5
993	R Cassiopeiæ Var. 3...	Oct. 27	R	23	51	30.50	...	39	22	8.6	9.5
994	... ..	Nov. 8	M	23	51	45.33	5	152	20	38.6	9.0
995	28 Piscium α ...	Sep. 15	M	23	52	19.59	...	83	53	22.0	...
	... ..	" 16	R		52	19.69	4		53	23.0	...
	... ..	Oct. 7	M		52	19.65	...		53	24.1	...
	... ..	" 20	R		52	19.65	...		43	24.1	...
	... ..	" 25	R		52	19.75	...		53	23.4	...
	... ..	" 26	R		52	19.74	...		53	23.7	...
	... ..	" 28	R		52	19.70	...		53	23.0	...
	... ..	Nov. 2	M		52	19.70	...		53	24.7	...
	... ..	" 3	M		52	19.66	...		53	22.2	...
	... ..	" 4	M		52	19.63	...		53	24.2	...
	... ..	" 10	M		52	19.69	...		26	24.1	...
	...	...	...	...	...	...	...	...	...	...	...
996	9686 Lacaille ...	Sep. 20	R	23	53	32.51	5	143	51	14.9	7.0
	... ..	Oct. 4	M		53	32.44	5		51	16.6	7.1
	... ..	Nov. 7	M		53	32.39	...		51	14.5	6.7
997	... ..	Oct. 22	R	23	55	58.44	5	130	17	1.1	9.0
	... ..	" 24	R		55	58.48	...		17	1.5	9.3
998	... ..	Nov. 11	M	23	56	7.64	5	124	7	46.0	8.0
999	10094 Taylor ...	Sep. 29	R	23	57	47.27	...	147	36	0.5	7.7
1000	9721 Lacaille ...	Nov. 12	M	23	59	15.72	3	139	50	3.3	6.9

MEAN POSITIONS OF STARS

OBSERVED WITH THE

MADRAS MERIDIAN CIRCLE

IN THE YEAR

1864

REDUCED TO JANUARY 1. OF THAT YEAR.

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimation.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
1	11010 Taylor	7.9	1	0	0	28.80	147	35	39.1	1	0.96
2	... ..	9.1	1	0	0	42.06	151	23	53.2	1	0.85
3	21 Androm α (<i>Alpherat</i>)...	2.0	...	0	1	21.68	61	39	40.0	9	0.84
4	9739 Lacaille	7.6	2	0	2	4.03	130	20	36.3	2	0.75
5	7 Taylor	7.1	1	0	2	57.47	93	19	4.6	1	0.71
6	3 Lacaille	6.6	1	0	6	0.66	148	40	15.3	1	0.84
7	83 Pegasi γ (<i>Algenib</i>) ...	2.7	...	0	6	14.08	75	34	23.5	9	0.82
8	... ..	9.5	2	0	6	39.45	131	7	1.2	2	0.75
9	... ..	8.7	1	0	9	22.56	149	31	50.5	1	0.85
10	... ..	9.0	2	0	9	33.24	153	55	7.1	2	0.86
11	41 Lacaille	8.1	2	0	12	33.58	130	52	3.0	2	0.78
12	... ..	8.7	3	0	12	47.29	150	26	38.8	3	0.81
13	41 Piscium δ	5.6	2	0	13	36.08	82	33	55.0	2	0.71
14	... ..	9.0	1	0	13	31.22	152	57	39.5	1	0.85
15	81 Lacaille	7.2	1	0	18	38.22	130	0	39.9	1	0.74
16	12 Ceti	6.4	...	0	23	5.86	94	42	34.7	9	0.87
17	T Piscium Var. 3	10.5	1	0	24	57.60	76	9	0.4	1	0.82
18	... ..	8.2	3	0	27	7.86	76	14	8.1	3	0.72
19	132 Lacaille	9.0	1	0	27	18.38	151	53	55.9	1	0.85
20	970 Lalande	7.7	1	0	31	4.54	80	55	0.4	1	0.93
21	1010 Lalande	9.3	2	0	32	15.51	82	32	27.4	2	0.82
22	18 Cassiope α Var. 2	2.5	...	0	32	48.14	34	12	34.7	1	0.82
23	16 Ceti β	2.0	...	0	36	45.65	108	44	1.4	11	0.80
24	0.623 W. H. E	9.3	...	0	36	54.12	93	49	29.9	1	0.85
25	... ..	9.0	2	0	39	54.03	150	44	54.7	2	0.86
26	58 Piscium	5.0	1	0	39	55.34	78	46	8.8	1	0.78
27	63 Piscium δ	5.0	...	0	41	37.67	83	9	21.5	3	0.73
28	253 Lacaille	6.0	1	0	47	57.75	153	30	30.3	1	0.83
29	... ..	9.6	1	0	48	55.25	153	49	48.6	1	0.94
30	2 Urse Minoris	4.4	...	0	50	44.92	4	28	29.4	2	0.80
31	0.807 W. H. E	9.3	3	0	53	12.34	92	49	55.1	3	0.90
32	271 Lacaille	7.5	1	0	53	42.54	151	25	58.2	1	0.88
33	14 R. P. L.	6.2	..	0	53	58.25	3	24	53.8	1	0.94
34	70 Piscium	6.9	1	0	55	2.48	82	47	38.2	1	0.92
35	71 Piscium ϵ	4.5	..	0	55	53.21	82	50	25.3	8	0.54

17. T Piscium Var. 3. — Period irregular — Range 9.3 to 11th magnitude.

20. — 21. — Comparison stars for Arcturus in 1861.

22. α Cassiope Var. 2. — Irregular. — Range 2.2 to 2.8 magnitude.

24. — Comparison star for Europa in 1861.

20. — 12 R. P. L.

21. — Comparison star for Europa in 1862.

33. — 195 Groombridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in H. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
1	11010 Taylor ...	+ 3.0577	- 0.0462	...	- 20.055	+ 0.010	...	8377
2	... ..	+ 3.0646	- 0.0526	...	- 20.055	+ 0.010	...	...
3	21 Andromedæ a ...	+ 3.0763	+ 0.0182	+ 0.009	- 20.065	+ 0.013	+ 0.15	4
4	9739 Lacaille ...	+ 3.0618	- 0.0233	...	- 20.054	+ 0.013	...	...
5	7 Taylor ...	+ 3.0711	+ 0.0004	...	- 20.053	+ 0.015	...	12
6	3 Lacaille ...	+ 3.0135	- 0.0449	...	- 20.048	+ 0.021	...	...
7	88 Pegasi γ ...	+ 3.0813	+ 0.0100	0.000	- 20.048	+ 0.022	+ 0.02	26
8	... ..	+ 3.0382	- 0.0232	...	- 20.046	+ 0.022	...	...
9	... ..	+ 2.9792	- 0.0452	...	- 20.038	+ 0.027	...	...
10	... ..	+ 2.9583	- 0.0540	...	- 20.037	+ 0.027	...	...
11	41 Lacaille ...	+ 3.0387	- 0.0221	...	- 20.025	+ 0.033	...	...
12	... ..	+ 2.9406	- 0.0453	...	- 20.024	+ 0.033	...	...
13	41 Piscium δ ...	+ 3.0824	+ 0.0066	- 0.002	- 20.019	+ 0.036	- 0.01	66
14	... ..	+ 2.8006	- 0.0472	...	- 19.989	+ 0.043	...	...
15	51 Lacaille ...	+ 2.9809	- 0.0205	...	- 19.989	+ 0.044	...	...
16	12 Ceti ...	+ 3.0609	+ 0.0008	- 0.002	- 19.954	+ 0.055	+ 0.01	112
17	T Piscium Var. 3 ...	+ 3.1079	+ 0.0108	...	- 19.936	+ 0.058	...	...
18	... ..	+ 3.1108	+ 0.0169	...	- 19.915	+ 0.063	...	...
19	132 Lacaille ...	+ 2.7745	- 0.0413	...	- 19.913	+ 0.067	...	...
20	970 Lalande ...	+ 3.1010	+ 0.0085	...	- 19.871	+ 0.070	...	...
21	1010 Lalande ...	+ 3.0967	+ 0.0076	...	- 19.856	+ 0.072	...	...
22	18 Cassiopeiæ a Var. 2 ...	+ 3.3325	+ 0.0553	+ 0.006	- 19.850	+ 0.080	+ 0.04	160
23	16 Ceti δ ...	+ 2.9906	- 0.0055	+ 0.013	- 19.798	+ 0.080	- 0.02	196
24	0.628 W. B. E. ...	+ 3.0578	+ 0.0020	...	- 19.790	+ 0.080	...	...
25	... ..	+ 2.6586	- 0.0340	...	- 19.782	+ 0.073	...	...
26	58 Piscium ...	+ 3.1181	+ 0.0101	0.000	- 19.752	+ 0.087	0.00	213
27	63 Piscium δ ...	+ 3.1010	+ 0.0077	+ 0.003	- 19.725	+ 0.090	+ 0.05	222
28	253 Lacaille ...	+ 2.5123	- 0.0327	...	- 19.617	+ 0.094	...	231
29	... ..	+ 2.4957	- 0.0323	...	- 19.600	+ 0.095	...	...
30	2 Urae Minoris ...	+ 6.8234	+ 1.2850	+ 0.005	- 19.565	+ 0.227	+ 0.01	262
31	0.897 W. B. E. ...	+ 3.0572	+ 0.0034	...	- 19.537	+ 0.100	...	...
32	271 Lacaille ...	+ 2.5123	- 0.280	...	- 19.523	+ 0.092	...	276
33	14 R. P. L. ...	+ 8.0656	+ 1.0725	- 0.171	- 19.502	+ 0.282	- 0.02	273
34	70 Piscium ...	+ 3.1123	+ 0.0086	- 0.003	- 19.479	+ 0.116	+ 0.17	281
35	71 Piscium ε ...	+ 3.1125	+ 0.0087	- 0.002	- 19.462	+ 0.119	0.00	288

16-33.—Proper motions adopted from "Greenwich Catalogue."

31.—Proper motion in Polar Distance taken from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
36	29 Ceti	6.7	1	1	0	58.09	88	43	8.5	1	0.85
37	33 Ceti	6.3	...	1	3	33.56	88	16	49.1	3	0.00
38	86 Piscium 3 (1st) ...	6.0	...	1	6	37.58	53	8	35.8	2	0.77
39	1 Urs. Min. α (Polaris) ...	2.0	...	1	9	18.30	1	24	50.6	3	0.45
40	... ..	8.1	2	1	17	0.19	96	31	26.3	2	0.67
41	45 Ceti θ^1	4.0	...	1	17	13.51	98	53	11.6	6	0.45
42	... ..	7.6	1	1	18	53.11	151	20	23.0	1	0.93
43	... ..	8.2	1	1	23	28.19	87	43	58.8	1	0.84
44	99 Piscium η	4.5	...	1	24	12.55	75	21	24.9	10	0.62
45	... ..	8.6	1	1	25	44.66	150	21	41.4	1	0.86
46	514 Taylor	6.1	2	1	28	33.60	73	15	51.3	2	0.92
47	... ..	9.0	1	1	29	1.31	150	42	35.1	1	0.93
48	... ..	8.0	1	1	31	23.00	130	52	17.8	1	0.89
49	α Eridani (Achernar) ...	1.0	...	1	32	38.92	147	55	45.6	3	0.92
50	106 Piscium ν	4.7	...	1	34	21.29	85	12	7.6	6	0.88
51	503 Lacaille	7.7	1	1	35	42.98	151	41	18.8	1	0.85
52	110 Piscium ϕ	4.7	...	1	38	12.78	81	31	42.7	4	0.86
53	... ..	9.1	1	1	38	33.55	152	2	52.8	1	0.94
54	516 Lacaille	7.0	2	1	39	58.39	151	42	9.2	2	0.88
55	... ..	9.4	1	1	46	9.24	148	57	57.1	1	0.85
56	V Piscium Var. 5... ..	10.0	1	1	47	7.59	81	53	9.4	1	0.91
57	6 Arietis β	2.7	...	1	47	7.90	69	51	31.7	7	0.88
58	... ..	9.3	2	1	48	32.81	150	5	13.5	2	0.89
59	592 Lacaille	8.1	1	1	50	54.77	145	44	21.5	1	0.94
60	593 Lacaille	8.0	..	1	52	2.53	149	8	13.6	1	0.01
61	... ..	9.0	2	1	54	52.52	130	55	41.3	2	0.85
62	673 Taylor	6.0	1	1	56	13.31	72	24	8.3	1	0.86
63	... ..	9.3	2	1	59	23.52	150	2	31.5	2	0.89
64	13 Arietis α	2.0	...	1	59	30.67	67	10	58.3	7	0.89
65	607 Taylor	6.7	1	2	1	45.88	145	43	57.4	1	0.01
66	... ..	9.3	2	2	1	55.01	130	2	28.3	2	0.81
67	677 Lacaille	8.0	1	2	6	55.77	149	47	35.4	1	0.81
68	... ..	9.7	1	2	6	58.76	148	39	29.4	1	0.82
69	754 Taylor... ..	8.9	2	2	9	11.75	147	55	53.7	2	0.46
70	67 Ceti	6.0	...	2	10	12.06	97	3	2.8	7	0.91

37.—Used with Mars in opposition in 1862 for investigation of the constant of Solar Parallax.

56.—V Piscium Var. 5.—Supposed to vary between 6th and 9th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	"	"	"	
36	29 Ceti ...	+ 3.0800	+ 0.0058	+ 0.010	- 19.349	+ 0.126	+ 0.46	324
37	33 Ceti ...	+ 3.0830	+ 0.0062	- 0.003	- 19.288	+ 0.131	+ 0.02	344
38	86 Piscium ζ (1st) ...	+ 3.1181	+ 0.0090	+ 0.008	- 19.213	+ 0.139	+ 0.07	368
39	1 Urs. Min. α (Polaris) ...	+ 18.8156	+ 12.6804	+ 0.063	- 19.145	+ 0.825	0.00	390
40	... ..	+ 3.0217	+ 0.0028	...	- 18.933	+ 0.153	...	...
41	45 Ceti θ^1 ...	+ 3.0029	+ 0.0018	- 0.007	- 18.928	+ 0.154	+ 0.22	420
42	... ..	+ 3.2467	- 0.0173	...	- 18.679	+ 0.119	...	...
43	... ..	+ 3.0909	+ 0.0073	...	- 18.740	+ 0.169	...	...
44	99 Piscium η ...	+ 3.1976	+ 0.0142	0.000	- 18.717	+ 0.176	0.00	453
45	... ..	+ 2.2133	- 0.0148	...	- 18.668	+ 0.126	...	...
46	514 Taylor ...	+ 3.2236	+ 0.0154	...	- 18.576	+ 0.185	...	477
47	... ..	+ 2.1694	- 0.0135	...	- 18.561	+ 0.128	...	...
48	... ..	+ 2.6229	- 0.0101	...	- 18.482	+ 0.157	...	...
49	α Eridani (Achernar) ...	+ 2.2326	- 0.0128	+ 0.008	- 18.439	+ 0.137	+ 0.07	507
50	106 Piscium ν ...	+ 3.1169	+ 0.0091	- 0.004	- 18.380	+ 0.191	- 0.04	518
51	503 Lacaille ...	+ 2.0654	- 0.0104	...	- 18.332	+ 0.130	...	...
52	110 Piscium ϵ ...	+ 3.1548	+ 0.0111	+ 0.006	- 18.241	+ 0.199	- 0.01	537
53	... ..	+ 2.0216	- 0.0089	...	- 18.229	+ 0.131	...	...
54	516 Lacaille ...	+ 2.0228	- 0.0085	...	- 18.177	+ 0.133	...	543
55	... ..	+ 2.0792	- 0.0082	...	- 17.942	+ 0.144	...	...
56	V Piscium Var. ζ ...	+ 3.1530	+ 0.0111	...	- 17.904	+ 0.216	...	...
57	6 Arietis β ...	+ 3.2930	+ 0.0153	+ 0.002	- 17.904	+ 0.226	+ 0.11	577
58	... ..	+ 2.0121	- 0.0067	...	- 17.847	+ 0.142	...	...
59	542 Lacaille ...	+ 2.1588	- 0.0081	...	- 17.752	+ 0.165	...	...
60	593 Lacaille ...	+ 2.0214	- 0.0061	...	- 17.705	+ 0.147	...	...
61	... ..	+ 2.5151	- 0.0069	...	- 17.583	+ 0.154	...	...
62	673 Taylor ...	+ 3.2781	+ 0.0167	...	- 17.530	+ 0.269	...	632
63	... ..	+ 1.9176	- 0.0031	...	- 17.395	+ 0.146	...	...
64	13 Arietis α ...	+ 3.3523	+ 0.0208	+ 0.012	- 17.390	+ 0.252	+ 0.15	648
65	697 Taylor ...	+ 2.0777	- 0.0053	...	- 17.290	+ 0.161	...	669
66	... ..	+ 2.5022	- 0.0058	...	- 17.283	+ 0.192	...	...
67	677 Lacaille ...	+ 1.9641	- 0.0011	...	- 17.057	+ 0.150	...	...
68	... ..	+ 1.9169	- 0.0021	...	- 17.055	+ 0.154	...	...
69	754 Taylor ...	+ 1.9295	- 0.0021	...	- 16.952	+ 0.157	...	...
70	67 Ceti ...	+ 2.9831	+ 0.0049	+ 0.008	- 16.905	+ 0.242	+ 0.14	704

36—38 — Proper motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
71	68 Ceti e Var. 1 (Mira) ...	Var.	3	2	12	28.68	93	35	52.2	3	0.64
72	... ..	8.0	1	2	16	23.72	151	19	24.7	1	0.93
73	818 Taylor... ..	7.5	1	2	19	8.13	147	25	59.7	1	0.01
74	... ..	8.5	...	2	20	10.68	146	32	43.2	2	0.40
75	73 Ceti 1 ^a	4.5	...	2	20	55.53	82	9	5.3	9	0.72
76	A Horologii	6.0	1	2	21	6.12	150	55	20.6	1	0.93
77	... ..	8.2	1	2	24	27.94	147	2	45.3	1	0.95
78	782 Lacaille	7.4	2	2	26	13.19	148	24	55.0	2	0.44
79	... ..	9.5	1	2	29	10.94	147	37	29.6	1	0.91
80	31 Arietis	6.5	1	2	29	12.94	78	8	40.0	2	0.94
81	... ..	9.8	2	2	30	45.40	147	34	54.5	2	0.45
82	... ..	9.6	1	2	31	15.89	151	39	24.0	1	0.93
83	II. 556. W. B. N.	8.3	2	2	33	10.21	74	54	0.0	2	0.90
84	... ..	8.7	1	2	33	59.16	74	56	35.3	1	0.56
85	849 Lacaille (1st)	7.9	1	2	36	0.55	150	9	10.0	1	0.01
86	86 Ceti γ	3.7	...	2	36	15.35	87	20	22.6	8	0.69
87	38 Arietis	5.1	2	2	37	33.12	78	7	44.0	3	0.89
88	II. 676 W. B. N.	8.1	3	2	40	8.14	75	20	24.5	3	0.99
89	42 Arietis π	5.4	2	2	41	42.59	73	6	15.7	2	0.40
90	... ..	8.8	2	2	43	17.00	148	0	37.2	2	0.02
91	II. 733. W. B. E.	9.5	2	2	43	19.15	76	2	13.0	2	0.99
92	... ..	9.2	1	2	45	15.73	76	27	53.8	1	0.03
93	969 Taylor	7.5	2	2	45	37.40	74	4	28.3	2	0.89
94	87 Runkler	5.9	1	2	46	0.94	153	22	19.5	1	0.79
95	5380 Lalande	8.1	2	2	47	42.02	74	14	41.4	2	0.10
96	941 Lacaille	6.5	2	2	50	26.45	146	26	5.9	2	0.02
97	... ..	8.6	1	2	52	21.64	150	17	9.5	1	0.01
98	... ..	8.4	1	2	53	15.55	146	44	28.5	1	0.95
99	969 Lacaille	7.9	1	2	54	53.20	144	13	57.3	1	0.64
100	92 Ceti α (Menker)	2.3	...	2	55	10.32	86	26	46.6	7	0.80
101	25 Persei ρ Var. 2.	4.0	...	2	56	23.54	51	41	23.1	1	0.01
102	1037 Taylor	9.2	2	2	56	54.10	150	21	34.7	2	0.06
103	26 Persei β Var. 1. (Algol)	2.7	...	2	56	19.81	49	34	17.4	2	0.88
104	1047 Taylor	7.3	2	2	58	51.50	151	19	53.2	2	0.51
105	1052 Taylor	6.0	1	3	0	25.00	150	16	1.7	1	0.01

70.—α Ceti Var. 1.—(Mira)—Period 331 days. Range, 2nd to 10th magnitude.

83—88.—91—93—95.—Comparison stars for Victoria in 1861.

101.—ρ Persei Var. 2.—Changes irregularly from 3.5 to 4.3 magnitude.

103.—β Persei Var. 1. (Algol)—Period 2.867 days. Range, 2.5 to 4th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
71	68 Ceti α Var. 1	+ 3.0261	+ 0.0064	- 0.001	- 16.796	+ 0.248	+ 0.23	720
72	" "	+ 1.7026	+ 0.0036	"	- 16.607	+ 0.146	"	"
73	818 Taylor	+ 1.8778	- 0.0001	"	- 16.472	+ 0.163	"	763
74	" "	+ 1.9102	- 0.0005	"	- 16.420	+ 0.167	"	"
75	73 Ceti 1 st	+ 3.1783	+ 0.0117	+ 0.001	- 16.382	+ 0.276	+ 0.02	760
76	A Horologii	+ 1.6835	+ 0.0044	"	- 16.372	+ 0.149	"	762
77	" "	+ 1.8565	+ 0.0008	"	- 16.201	+ 0.167	"	"
78	782 Lacaille	+ 1.7760	+ 0.0026	"	- 16.110	+ 0.161	"	"
79	" "	+ 1.7943	+ 0.0024	"	- 15.954	+ 0.166	"	"
80	31 Arietis	+ 3.2422	+ 0.0137	+ 0.017	- 15.952	+ 0.294	+ 0.00	798
81	" "	+ 1.7848	+ 0.0027	"	- 15.870	+ 0.166	"	"
82	" "	+ 1.5524	+ 0.0084	"	- 15.843	+ 0.146	"	"
83	π 556 W. B. N	+ 3.2957	+ 0.0154	"	- 15.741	+ 0.305	"	"
84	" "	+ 3.2960	+ 0.0154	"	- 15.696	+ 0.306	"	"
85	849 Lacaille (1st)	+ 1.6056	+ 0.0071	"	- 15.585	+ 0.154	"	"
86	86 Ceti γ	+ 3.1112	+ 0.0094	- 0.011	- 15.572	+ 0.294	+ 0.19	837
87	38 Arietis	+ 3.2505	+ 0.0137	+ 0.008	- 15.500	+ 0.308	+ 0.10	844
88	π 676 W. B. N	+ 3.2971	+ 0.0150	"	- 15.355	+ 0.315	"	"
89	42 Arietis ν	+ 3.2355	+ 0.0163	- 0.002	- 15.266	+ 0.322	- 0.02	870
90	" "	+ 1.6726	+ 0.0057	"	- 15.176	+ 0.167	"	"
91	π 733 W. B. E	+ 3.2895	+ 0.0146	"	- 15.174	+ 0.320	"	"
92	" "	+ 3.2846	+ 0.0144	"	- 15.068	+ 0.322	"	"
93	969 Taylor	+ 3.3244	+ 0.0157	"	- 15.042	+ 0.326	"	892
94	87 Romker	+ 1.3050	+ 0.0158	"	- 15.019	+ 0.132	"	895
95	5390 Lalande	+ 3.3241	+ 0.0156	"	- 14.921	+ 0.330	"	"
96	941 Lacaille	+ 1.7078	+ 0.0053	"	- 14.760	+ 0.175	"	"
97	" "	+ 1.4716	+ 0.0107	"	- 14.646	+ 0.153	"	"
98	" "	+ 1.6736	+ 0.0060	"	- 14.592	+ 0.174	"	"
99	969 Lacaille	+ 1.7893	+ 0.0040	"	- 14.494	+ 0.186	"	"
100	92 Ceti α	+ 3.1294	+ 0.0098	- 0.002	- 14.476	+ 0.323	+ 0.11	949
101	25 Persæ ρ Var. 2	+ 3.8074	+ 0.0032	+ 0.010	- 14.398	+ 0.309	+ 0.11	953
102	1037 Taylor	+ 1.4332	+ 0.0116	"	- 14.372	+ 0.152	"	"
103	Persæ θ Var. 1	+ 3.8719	+ 0.0056	- 0.002	- 14.322	+ 0.406	- 0.01	963
104	1047 Taylor	+ 1.3441	+ 0.0139	"	- 14.190	+ 0.145	"	968
105	1052 Taylor	+ 1.4138	+ 0.0120	"	- 14.165	+ 0.152	"	973

71-80-101. Proper Motions from Mr. Stone's List, Vol. 33, "Memoirs R. A. S."

75- Proper Motions adopted from "Greenwich Catalogue"

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimation.	Mean Right Ascension.			Mean Polar Distance.			Observations	Fraction of Year.
				h.	m.	s.	°	'	"		
106	33 R. P. L. ...	5.8	...	3	0	42.11	5	34	52.8	1	0.42
107	57 Arietis δ ...	4.2	...	3	3	51.34	70	47	26.0	9	0.92
108	1007 Lacaille... ..	7.0	1	3	4	48.78	152	14	28.7	1	0.05
109	1092 Taylor ...	6.9	3	3	7	15.56	148	19	29.4	3	0.33
110	... ..	9.0	1	3	7	16.15	145	40	32.5	1	0.95
111	... ..	8.6	1	3	12	41.14	130	50	15.5	1	0.03
112	33 Persei α ...	2.3	...	3	14	37.57	40	37	34.5	3	0.92
113	... ..	9.0	1	3	14	51.02	150	6	18.7	1	0.04
114	5 ^h Reticuli ...	6.1	2	3	15	15.71	153	1	38.0	2	0.06
115	... ..	7.8	1	3	20	18.17	140	18	56.3	1	0.01
116	... ..	7.4	2	3	20	34.35	140	28	29.8	2	0.04
117	... ..	7.5	1	3	22	0.03	88	12	26.3	1	0.02
118	34 R. P. L. ...	5.9	...	3	22	16.24	3	47	27.2	3	0.62
119	1143 Lacaille ...	5.7	1	3	27	0.67	153	25	6.5	2	0.05
120	1150 Lacaille ...	7.7	1	3	28	26.56	152	28	17.6	1	0.95
121	1159 Lacaille ...	6.9	2	3	30	16.33	151	28	32.9	2	0.06
122	1192 Lacaille ..	8.5	1	3	34	58.48	147	43	46.9	1	0.03
123	1193 Lacaille ...	8.1	1	3	35	15.49	146	35	14.0	1	0.01
124	1200 Lacaille ...	6.9	1	3	36	24.39	146	40	30.9	2	0.05
125	17 Tauri (<i>Electra</i>) ...	4.0	...	3	36	48.28	66	18	59.2	1	0.01
126	25 Tauri η (<i>Aleyone</i>) ..	3.5	...	3	39	24.23	66	19	7.3	11	0.76
127	1319 Taylor ...	5.6	2	3	42	30.15	155	14	8.4	2	0.06
128	... ..	9.0	1	3	45	11.82	76	27	48.7	1	0.90
129	... ..	8.8	2	3	46	32.38	146	33	39.1	2	0.02
130	... ..	8.3	2	3	48	3.74	150	50	16.6	2	0.02
131	34 Eridani γ ¹ ...	3.3	...	3	51	41.13	103	53	52.6	5	0.71
132	35 Tauri A Var. 1... ..	6.3	1	3	53	8.92	77	53	48.7	1	0.08
133	... ..	7.9	1	3	53	40.29	143	8	23.6	1	0.01
134	1327 Lacaille ...	5.9	3	3	54	18.85	153	51	28.4	3	0.35
135	36 Tauri ..	6.5	7	3	56	13.80	66	16	18.9	10	0.94
136	37 Tauri A ¹ ...	4.7	..	3	56	39.51	68	17	30.3	1	0.79
137	1347 Lacaille ...	7.6	2	3	58	6.87	149	2	34.8	2	0.03
138	1359 Lacaille ...	9.2	2	4	0	0.71	147	50	4.2	2	0.04
139	1375 Lacaille ..	9.0	2	4	2	54.37	148	50	43.8	2	0.06
140	... ..	9.8	1	4	3	23.80	68	30	18.3	1	0.05

106.—595 Groombridge.

115.—643 Groombridge.

132.—A Tauri Var. 1.—Period 3.96 days—Range, 3.5 to 4.3 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
106	33 R. P. L. . .	+ 12.7777	+ 1.5817	...	- 13.138	+ 1.328	+ 0.12	980
107	57 Arietis 3 . .	+ 3.4069	+ 0.0171	+ 0.010	- 13.940	+ 0.364	0.00	986
108	1007 Lacaille . .	+ 1.2385	+ 0.0169	...	- 13.890	+ 0.136	...	...
109	1002 Taylor . . .	+ 1.4020	+ 0.0100	...	- 13.724	+ 0.165	...	1002
110	... . .	+ 1.6442	+ 0.0069	...	- 13.724	+ 0.181	...	...
111	... . .	+ 2.2110	+ 0.0012	...	- 13.373	+ 0.246	...	...
112	33 Persæ a . . .	+ 4.2420	+ 0.0493	+ 0.002	- 13.248	+ 0.472	+ 0.06	1043
113	... . .	+ 1.3244	+ 0.0138	...	- 13.233	+ 0.151	...	...
114	3 ^a Reticuli . . .	+ 1.0943	+ 0.0203	+ 0.190	- 13.206	+ 0.126	- 0.05	1051
115	... . .	+ 1.3442	+ 0.0131	...	- 12.870	+ 0.156	...	...
116	... . .	+ 1.3314	+ 0.0133	...	- 12.853	+ 0.155	...	...
117	... . .	+ 3.1043	+ 0.0089	...	- 12.757	+ 0.355	...	...
118	34 R. P. L. . . .	+ 18.6473	+ 3.1896	+ 0.136	- 12.739	+ 2.105	+ 0.06	1061
119	1143 Lacaille . . .	+ 0.9796	+ 0.0227	...	- 12.415	+ 0.117	...	1103
120	1150 Lacaille . . .	+ 1.0476	+ 0.0203	...	- 12.317	+ 0.126	...	...
121	1159 Lacaille . .	+ 1.1186	+ 0.0180	...	- 12.190	+ 0.135	...	...
122	1192 Lacaille . . .	+ 1.3647	+ 0.0120	...	- 11.861	+ 0.165	...	...
123	1193 Lacaille . . .	+ 1.4364	+ 0.0105	...	- 11.841	+ 0.174	...	...
124	1200 Lacaille . . .	+ 1.4248	+ 0.0107	...	- 11.759	+ 0.173	...	...
125	17 Tauri (<i>Electra</i>) . . .	+ 3.5478	+ 0.0180	0.000	- 11.731	+ 0.424	+ 0.04	1147
126	25 Tauri η (<i>Aleyone</i>) . .	+ 3.3515	+ 0.0177	- 0.001	- 11.546	+ 0.430	+ 0.06	1166
127	1318 Taylor . . .	+ 0.6800	+ 0.0294	+ 0.050	- 11.323	+ 0.097	- 0.06	1197
128	... . .	+ 3.3329	+ 0.0124	...	- 11.128	+ 0.410	...	...
129	... . .	+ 1.3811	+ 0.0111	...	- 11.029	+ 0.178	...	...
130	... . .	+ 1.0623	+ 0.0177	...	- 10.918	+ 0.135	...	...
131	34 Eridani γ^1 . . .	+ 2.7917	+ 0.0047	+ 0.002	- 10.652	+ 0.361	+ 0.12	1234
132	35 Tauri A Var. 1 . . .	+ 3.3160	+ 0.0115	- 0.002	- 10.542	+ 0.416	+ 0.02	1241
133	... . .	+ 1.5529	+ 0.0082	...	- 10.503	+ 0.198	...	...
134	1327 Lacaille . . .	+ 0.7474	+ 0.0250	...	- 10.485	+ 0.097	...	1248
135	36 Tauri	+ 3.5761	+ 0.0164	+ 0.002	- 10.312	+ 0.451	- 0.01	1253
136	37 Tauri A ¹ . . .	+ 3.5292	+ 0.0153	+ 0.004	- 10.280	+ 0.446	+ 0.09	1257
137	1347 Lacaille . . .	+ 1.1510	+ 0.0148	...	- 10.170	+ 0.149	...	...
138	1359 Lacaille . . .	+ 1.2310	+ 0.0131	...	- 10.027	+ 0.169	...	...
139	1375 Lacaille . . .	+ 1.1429	+ 0.0144	...	- 9.806	+ 0.149	...	...
140	... . .	+ 3.5319	+ 0.0147	...	- 9.765	+ 0.454	...	...

106.—The Proper Motion in Polar Distance taken from "*Greenwich Catalogue*."114.—127.—Proper Motions adopted from "*Stone's Catalogue*."118.—132.—135.—Proper Motions adopted from "*Greenwich Catalogue*."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.			Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
						<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
141	37 Eridani	...	...	5.6	1	4	3	44.58	97	16	55.3	1	0.01
142	"	...	...	8.8	2	4	5	0.17	150	5	32.6	2	0.02
143	38 Eridani α^1	...	...	4.3	...	4	5	13.65	97	11	41.4	3	0.34
144	"	...	...	8.5	2	4	9	18.70	149	31	9.8	2	0.05
145	"	...	...	8.0	1	4	9	46.60	129	18	57.0	1	0.89
146	1489 Taylor	...	...	7.1	2	4	11	2.66	148	22	0.2	2	0.02
147	1425 Lacaille	...	...	6.2	2	4	13	1.31	152	32	3.0	2	0.06
148	U Tauri Var. 7	...	...	9.7	1	4	13	53.65	70	30	42.4	1	0.80
149	T Tauri Var. 6	...	...	10.4	2	4	14	3.84	70	47	20.0	2	0.08
150	ϵ Reticuli	...	...	5.0	2	4	14	8.75	149	37	45.2	2	0.03
151	1513 Taylor	...	...	6.7	2	4	14	18.26	151	17	2.7	2	0.49
152	61 Tauri δ^1	...	...	4.0	...	4	15	5.61	72	46	48.3	3	0.30
153	62 Tauri	...	...	7.0	...	4	15	47.90	66	1	11.1	2	0.97
154	"	...	...	8.8	1	4	16	45.53	149	4	26.5	1	0.01
155	69 Tauri ν^1	...	...	4.5	...	4	18	10.38	67	29	55.5	7	0.94
156	74 Tauri ϵ ...	...	...	3.7	...	4	20	40.69	71	7	29.4	13	0.38
157	R Tauri Var. 2	...	...	9.9	2	4	20	51.07	80	8	37.7	2	0.08
158	"	...	...	10.2	2	4	22	21.67	80	21	14.7	2	0.49
159	1582 Taylor	...	...	6.0	1	4	23	12.66	151	32	49.3	1	0.06
160	1519 Lacaille	...	...	8.2	2	4	25	35.42	153	6	6.6	2	0.07
161	1520 Lacaille	...	...	8.4	2	4	26	41.07	147	29	2.4	2	0.47
162	87 Tauri α (Aldebaran)	...	...	1.0	...	4	28	7.16	73	46	3.6	9	0.34
163	R Reticuli Var. 1	...	...	8.5	1	4	32	8.35	153	18	40.1	1	0.11
164	IV 696 W. B. N.	...	...	9.2	4	4	32	36.08	66	27	30.2	4	0.96
165	"	...	...	8.6	2	4	33	32.41	144	53	50.2	2	0.04
166	IV 726 W. B. N.	...	...	8.1	3	4	33	50.98	66	15	17.4	6	0.93
167	94 Tauri ν	...	...	4.7	...	4	34	5.05	67	18	27.6	7	0.78
168	95 Tauri	...	...	6.5	1	4	35	0.01	66	10	22.0	1	0.80
169	1567 Lacaille	...	...	5.8	3	4	38	11.17	152	20	47.0	3	0.07
170	1566 Lacaille	...	...	7.8	1	4	35	46.00	148	23	26.3	1	0.01
171	1663 Taylor	...	...	7.0	1	4	36	50.08	138	48	8.3	1	0.01
172	1582 Lacaille	...	...	8.5	2	4	37	18.61	152	38	43.4	2	0.10
173	"	...	...	9.3	2	4	40	19.23	151	20	52.6	2	0.06
174	ϵ Doradus	...	...	6.3	3	4	42	18.43	149	20	0.6	3	0.05
175	1629 Lacaille	...	...	6.5	2	4	43	42.86	153	28	32.7	2	0.07

148.—U Tauri Var. 7.—Period unknown.—Range, 9th to 10.5 magnitude.

149.—T Tauri Var. 6.—Period unknown.—Range, 9th to 13th magnitude.

157.—R Tauri Var. 2.—Period 325 days.—Range, 8th magnitude to invisibility.

163.—R Reticuli Var. 1.—Period 281 days.—Range, 7th magnitude to invisibility.

164.—166.—Comparison stars used with Mars in 1864 for investigation of the constant of Solar Parallax.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
141	37 Eridani ...	+ 2.0228	+ 0.0058	- 0.002	- 9.743	+ 0.377	+ 0.01	1284
142	... ..	+ 1.0843	+ 0.0165	...	- 9.640	+ 0.136	...	...
143	38 Eridani s ¹ ...	+ 2.0240	+ 0.0058	- 0.002	- 9.629	+ 0.370	- 0.07	1290
144	... ..	+ 1.0603	+ 0.0155	...	- 9.313	+ 0.141	...	...
145	... ..	+ 2.1015	+ 0.0035	...	- 9.278	+ 0.276	...	...
146	1480 Taylor ...	+ 1.1423	+ 0.0137	...	- 9.180	+ 0.152	...	1325
147	1425 Lacaille ...	+ 0.7752	+ 0.0210	...	- 9.025	+ 0.105	...	...
148	U Tauri Var. 7 ...	+ 3.4955	+ 0.0129	...	- 8.957	+ 0.460	...	...
149	T Tauri Var. 6 ...	+ 3.4891	+ 0.0128	...	- 8.944	+ 0.400	...	...
150	e Reticuli ...	+ 1.0296	+ 0.0155	...	- 8.937	+ 0.139	...	1344
151	1513 Taylor ...	+ 0.8866	+ 0.0182	...	- 8.925	+ 0.120	...	1345
152	61 Tauri s ¹ ...	+ 3.4438	+ 0.0119	+ 0.004	- 8.863	+ 0.455	+ 0.03	1346
153	62 Tauri ...	+ 3.6064	+ 0.0146	+ 0.004	- 8.807	+ 0.477	+ 0.01	1353
154	... ..	+ 1.0630	+ 0.0146	...	- 8.731	+ 0.144	...	...
155	69 Tauri v ¹ ...	+ 3.5722	+ 0.0138	+ 0.007	- 8.620	+ 0.475	+ 0.05	1367
156	74 Tauri e ...	+ 3.4869	+ 0.0120	+ 0.005	- 8.422	+ 0.466	+ 0.03	1376
157	R Tauri Var. 2 ...	+ 3.2830	+ 0.0092	...	- 8.408	+ 0.439	...	...
158	... ..	+ 3.2790	+ 0.0090	...	- 8.287	+ 0.440	...	...
159	1582 Taylor ...	+ 0.8200	+ 0.0163	...	- 8.220	+ 0.113	...	1400
160	1519 Lacaille ...	+ 0.6570	+ 0.0212	...	- 8.030	+ 0.091	...	...
161	1520 Lacaille ...	+ 1.1462	+ 0.0122	...	- 7.942	+ 0.157	...	...
162	57 Tauri (Aldebaran) ...	+ 3.4303	+ 0.0105	+ 0.004	- 7.927	+ 0.464	+ 0.17	1420
163	R Reticuli Var. 1 ...	+ 0.6055	+ 0.0210	...	- 7.502	+ 0.085	...	...
164	IV 696 W. R. N. ...	+ 3.6128	+ 0.0127	...	- 7.465	+ 0.493	...	...
165	... ..	+ 1.3037	+ 0.0096	...	- 7.388	+ 0.180	...	...
166	IV 720 W. R. N. ...	+ 3.6192	+ 0.0127	...	- 7.363	+ 0.494	...	...
167	94 Tauri r ...	+ 3.5024	+ 0.0122	0.000	- 7.343	+ 0.491	+ 0.02	1449
168	95 Tauri ...	+ 3.6224	+ 0.0125	+ 0.001	- 7.299	+ 0.495	0.00	1453
169	1567 Lacaille ...	+ 0.6031	+ 0.0156	...	- 7.254	+ 0.007	...	...
170	1566 Lacaille ...	+ 1.0381	+ 0.0128	...	- 7.207	+ 0.144	...	...
171	1663 Taylor ...	+ 1.6141	+ 0.0059	...	- 7.119	+ 0.227	...	...
172	1592 Lacaille ...	+ 0.6541	+ 0.0189	...	- 7.080	+ 0.092	...	1466
173	... ..	+ 0.7715	+ 0.0163	...	- 6.833	+ 0.109	...	...
174	e Doradus ...	+ 0.5806	+ 0.0141	...	- 6.660	+ 0.125	...	1489
175	1629 Lacaille ...	+ 0.5408	+ 0.0197	...	- 6.553	+ 0.077	...	...

153—168.—Proper motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
176	IV 995 W. B. N. ...	8.0	8	4	45	6.56	66	3	0.8	9	0.93
177	... ..	8.8	1	4	45	55.56	153	4	2.2	1	0.11
178	IV 1018 W. B. N. ...	8.2	6	4	45	58.67	66	13	39.4	9	0.94
179	1656 Lacaille ...	7.9	3	4	47	56.06	149	2	1.1	3	0.06
180	3 Aurigæ ...	3.5	...	4	48	8.45	57	3	11.6	8	0.07
181	99 Tauri ...	6.5	...	4	49	33.67	66	16	3.5	6	0.89
182	1761 Taylor ...	7.1	1	4	49	59.57	129	18	38.7	1	0.08
183	1780 Taylor ...	7.5	1	4	52	15.36	144	38	49.0	1	0.02
194	... ..	9.0	1	4	52	18.70	129	39	52.4	1	0.01
185	... ..	9.1	1	4	52	40.71	150	37	52.6	1	0.95
186	1797 Taylor ...	6.8	2	4	54	51.40	148	16	57.6	2	0.04
187	102 Tauri ...	5.0	1	4	54	58.18	68	36	28.7	2	0.12
188	1697 Lacaille ...	8.7	1	4	56	51.21	129	7	11.5	1	0.00
189	1811 Taylor ...	6.0	1	4	57	2.80	129	55	3.5	1	0.06
190	1706 Lacaille ...	7.9	2	4	57	25.61	129	16	33.4	3	0.36
191	104 Tauri m ...	5.5	...	4	59	24.97	71	32	28.9	1	0.13
192	2 Leporis ...	4.0	...	4	59	42.22	112	33	22.4	5	0.08
193	103 Tauri ...	6.0	...	4	59	49.42	65	55	7.0	4	0.89
194	1739 Lacaille ...	8.6	2	5	2	51.41	146	57	53.7	2	0.50
195	13 Aurigæ a (Capella) ...	1.0	...	5	0	38.75	44	8	40.3	2	0.07
196	19 Orionis β (Rigel) ...	1.0	...	5	8	0.14	98	21	42.4	7	0.20
197	... ..	9.1	2	5	8	29.42	150	36	20.8	2	0.06
198	... ..	9.4	2	5	10	55.61	129	48	31.7	2	0.94
199	... ..	7.9	1	5	13	25.19	153	41	44.1	2	0.06
200	... ..	8.0	1	5	14	50.32	153	29	22.4	1	0.12
201	... ..	8.4	2	5	17	37.79	153	7	20.0	2	0.07
202	112 Tauri β ..	2.0	...	5	17	41.80	61	30	41.7	3	0.37
203	40 R. P. L. ...	6.2	...	5	18	45.12	4	53	3.4	1	0.46
204	1984 Taylor ...	7.6	2	5	18	51.34	150	54	50.5	2	0.07
205	... ..	9.0	1	5	19	4.78	148	14	18.4	1	0.00
206	... ..	9.3	1	5	19	48.66	131	3	54.0	1	0.06
207	... ..	10.2	2	5	21	42.40	59	41	0.5	2	0.06
208	... ..	7.4	2	5	22	35.25	152	42	6.3	2	0.00
209	λ Doradæ ...	6.1	2	5	24	20.53	149	1	43.8	2	0.49
210	24 Orionis δ Var. 1 ...	2.0	...	5	25	2.60	50	24	9.8	3	0.08

176.—178.—Stars used with Mars in 1864 for investigation of the constant of Solar Parallax.

203.—214 Groombridge.

207.—Observed by mistake for the planet Anconia

210.—δ Orionis Var. 1.—Supposed to vary irregularly between 2.2 and 2.7 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
176	IV 995 W. H. N. ...	+ 3.6315	+ 0.0114	...	- 6.437	+ 0.506	...	...
177	... ..	+ 0.5767	+ 0.0146	...	- 6.370	+ 0.083	...	...
178	IV 1018 W. H. N. ...	+ 3.6306	+ 0.0113	...	- 6.365	+ 0.506	...	...
179	1656 Lacaille ...	+ 0.9532	+ 0.0124	...	- 6.202	+ 0.136	...	...
180	3 Aurigæ ...	+ 3.5962	+ 0.0144	- 0.003	- 6.186	+ 0.544	+ 0.02	1530
181	99 Tauri ...	+ 3.6324	+ 0.0109	+ 0.004	- 6.067	+ 0.508	+ 0.03	1527
182	1761 Taylor ...	+ 3.0280	+ 0.0036	...	- 6.081	+ 0.285	...	...
183	1780 Taylor ...	+ 1.2092	+ 0.0084	...	- 5.812	+ 0.160	...	...
184	... ..	+ 2.0115	+ 0.0038	...	- 5.837	+ 0.284	...	...
185	... ..	+ 0.7980	+ 0.0139	...	- 5.807	+ 0.113	...	...
186	1797 Taylor ...	+ 0.9956	+ 0.0111	...	- 5.624	+ 0.141	...	...
187	102 Tauri ...	+ 3.5749	+ 0.0095	+ 0.004	- 5.614	+ 0.503	+ 0.06	1551
188	1697 Lacaille ...	+ 2.0258	+ 0.0036	...	- 5.456	+ 0.286	...	...
189	1811 Taylor ...	+ 1.0954	+ 0.0034	...	- 5.439	+ 0.282	...	1561
190	1705 Lacaille ...	+ 2.0192	+ 0.0037	...	- 5.408	+ 0.286	...	...
191	104 Tauri m ...	+ 3.5028	+ 0.0083	+ 0.040	- 5.240	+ 0.495	- 0.02	1568
192	2 Leporis ...	+ 2.5357	+ 0.0033	+ 0.001	- 5.215	+ 0.359	+ 0.08	1575
193	103 Tauri ...	+ 3.6492	+ 0.0097	0.000	- 5.206	+ 0.516	- 0.05	1572
194	1739 Lacaille ...	+ 1.0795	+ 0.0093	...	- 4.949	+ 0.155	...	...
196	13 Aurigæ (Capella) ...	+ 4.4123	+ 0.0173	+ 0.008	- 4.627	+ 0.629	+ 0.43	1613
196	19 Orionis β (Rigel) ...	+ 2.8505	+ 0.0040	- 0.001	- 4.511	+ 0.412	+ 0.02	1623
197	... ..	+ 0.7584	+ 0.0117	...	- 4.470	+ 0.110	...	...
198	... ..	+ 1.0833	+ 0.0036	...	- 4.262	+ 0.285	...	...
199	... ..	+ 0.4231	+ 0.0144	...	- 4.048	+ 0.062	...	...
200	... ..	+ 0.4437	+ 0.0138	...	- 3.927	+ 0.065	...	...
201	... ..	+ 0.4700	+ 0.0128	...	- 3.686	+ 0.070	...	...
202	112 Tauri β ...	+ 3.7853	+ 0.0082	+ 0.003	- 3.681	+ 0.545	+ 0.20	1681
203	40 R. P. L. ...	+ 18.4661	+ 0.6873	...	- 3.500	+ 2.682	...	1662
204	1984 Taylor ...	+ 0.7072	+ 0.0104	...	- 3.581	+ 0.103	...	1607
205	... ..	+ 0.9468	+ 0.0084	...	- 3.502	+ 0.138	...	...
206	... ..	+ 1.0251	+ 0.0035	...	- 3.503	+ 0.279	...	...
207	... ..	+ 3.8430	+ 0.0081	...	- 3.336	+ 0.554	...	...
208	... ..	+ 0.5160	+ 0.0113	...	- 3.260	+ 0.075	...	...
209	λ Doradæ ...	+ 0.8713	+ 0.0061	...	- 3.108	+ 0.127	...	1729
210	34 Orionis δ Var. 1 ...	+ 3.0327	+ 0.0039	+ 0.001	- 3.046	+ 0.443	+ 0.04	1730

181—193.—Proper motions adopted from "Greenwich Catalogue."

192.—Proper motions from Mr. Stone's list, Vol. 33, "Memoirs R. A. S."

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
211	11 Leporis α	3.0	...	5	26	44.02	107	55	20.2	2	0.53
212	46 Orionis ϵ	2.0	...	5	29	18.85	91	17	31.1	5	0.10
213	123 Tauri 3	3.5	...	5	29	31.12	68	56	40.1	4	0.50
214	... ..	7.0	1	5	30	59.44	150	13	2.9	2	0.50
215	1949 Lacaille	6.2	1	5	32	15.80	154	19	4.4	1	0.06
216	... ..	8.6	2	5	32	42.45	150	11	35.4	3	0.37
217	α Columba	2.0	...	5	34	43.52	124	8	55.3	6	0.24
218	2113 Taylor	8.5	1	5	35	8.22	130	45	36.4	1	0.01
219	1971 Lacaille	7.1	2	5	36	21.47	149	11	31.8	2	0.07
220	... ..	9.6	1	5	36	43.68	129	57	50.9	1	0.07
221	2184 Taylor	9.1	2	5	43	54.50	150	46	24.6	2	0.54
222	... ..	9.1	2	5	44	9.53	152	58	2.5	2	0.07
223	54 Orionis χ^1	5.0	...	5	46	19.70	69	45	11.8	2	0.03
224	58 Orionis α Var. 1	1.0	...	5	47	45.60	82	37	17.7	4	0.51
225	... ..	9.4	2	5	49	28.43	63	50	12.9	2	0.51
226	... ..	9.7	1	5	49	36.83	130	1	18.6	1	0.09
227	43 R. P. L.	6.6	...	5	52	0.00	3	14	22.0	1	0.61
228	... ..	9.0	1	5	52	41.05	129	32	33.9	1	0.05
229	... ..	8.8	1	5	53	1.65	130	24	59.2	1	0.97
230	64 Orionis χ^2	5.7	...	5	55	24.37	70	18	40.8	2	0.13
231	62 Orionis χ^4	5.0	1	5	55	50.52	69	51	42.9	1	0.11
232	2301 Taylor	6.5	1	5	58	29.56	148	6	17.9	1	0.09
233	2310 Taylor	6.8	2	5	59	37.53	150	29	6.8	2	0.02
234	67 Orionis ν	5.0	...	5	59	48.47	75	13	8.0	6	0.25
235	... ..	8.8	1	6	2	21.04	153	44	39.2	1	0.12
236	... ..	9.5	2	6	8	35.03	155	3	30.6	2	0.54
237	... ..	9.5	1	6	8	53.37	130	31	33.4	1	0.09
238	... ..	9.0	1	6	10	0.15	153	14	23.0	1	0.17
239	... ..	7.0	2	6	11	2.58	149	53	51.5	2	0.06
240	... ..	8.8	1	6	11	43.04	152	1	49.0	2	0.14
241	13 Geminorum μ	3.3	...	6	14	43.98	67	25	14.6	8	0.41
242	2273 Lacaille	6.0	2	6	17	3.66	153	58	24.9	2	0.17
243	2286 Lacaille	7.0	2	6	18	48.28	153	45	43.4	2	0.14
244	α Argus (Cassiopeus)	1.0	...	6	20	55.99	142	37	20.3	3	0.07
245	... ..	8.5	2	6	22	6.37	128	46	41.8	2	0.11

221.— α Orionis Var. 2 (*Retelgeus*)—Irregularly variable from 1.0 to 1.5 magnitude.

227.—1004 Groombridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	"	"	"	
211	11 Leporis α ..	+ 2.6441	+ 0.0029	+ 0.001	- 2.901	+ 0.383	0.00	1741
212	46 Orionis ϵ ...	+ 3.0121	+ 0.0035	- 0.002	- 2.678	+ 0.441	+ 0.01	1765
213	123 Tauri ζ ...	+ 3.5823	+ 0.0055	0.000	- 2.690	+ 0.519	+ 0.06	1767
214	" ..	+ 0.7546	+ 0.0079	...	- 2.532	+ 0.110	...	...
215	1940 Lacaille	+ 0.3121	+ 0.0106	...	- 2.421	+ 0.046	...	1790
216	" ..	+ 2.7547	+ 0.0076	...	- 2.382	+ 0.110	...	...
217	α Columba ..	+ 2.1706	+ 0.0027	+ 0.008	- 2.208	+ 0.316	0.00	1802
218	2113 Taylor ...	+ 1.9264	+ 0.0031	...	- 2.172	+ 0.260	...	...
219	1971 Lacaille	+ 0.8418	+ 0.0066	...	- 2.065	+ 0.123	...	...
220	" ..	+ 1.9573	+ 0.0030	...	- 2.083	+ 0.285	...	...
221	2184 Taylor ...	+ 0.6883	+ 0.0059	...	- 1.407	+ 0.101	...	...
222	" ..	+ 0.4578	+ 0.0067	...	- 1.385	+ 0.068	...	...
223	54 Orionis χ^1 ..	+ 3.5644	+ 0.0034	- 0.016	- 1.196	+ 0.520	+ 0.10	1876
224	58 Orionis α Var. 2 ...	+ 3.2449	+ 0.0027	+ 0.001	- 1.066	+ 0.473	0.00	1883
225	" ..	+ 3.7282	+ 0.0031	...	- 0.919	+ 0.543	...	...
226	" ..	+ 1.9504	+ 0.0027	...	- 0.900	+ 0.284	...	...
227	43 R. P. L. ..	+ 2.6839	+ 0.2385	...	- 0.699	+ 3.880	...	1879
228	" ..	+ 1.9688	+ 0.0026	...	- 0.640	+ 0.287	...	...
229	" ..	+ 1.9341	+ 0.0026	...	- 0.610	+ 0.282	...	...
230	64 Orionis χ^2 ..	+ 3.5503	+ 0.0022	+ 0.010	- 0.402	+ 0.518	+ 0.03	1984
231	62 Orionis χ^4 ..	+ 3.5623	+ 0.0022	0.000	- 0.364	+ 0.519	+ 0.02	1989
232	2301 Taylor ...	+ 0.9235	+ 0.0030	...	- 0.131	+ 0.135	...	1954
233	2310 Taylor ..	+ 0.7104	+ 0.0030	...	- 0.083	+ 0.104	...	...
234	67 Orionis ν ..	+ 3.4248	+ 0.0017	+ 0.001	- 0.017	+ 0.500	+ 0.02	1968
235	" ..	+ 0.3614	+ 0.0025	...	+ 0.206	+ 0.053	...	...
236	" ..	+ 0.1923	+ 0.0005	...	+ 0.750	+ 0.029	...	...
237	" ..	+ 1.9300	+ 0.0021	...	+ 0.777	+ 0.281	...	...
238	" ..	+ 0.4232	+ 0.0006	...	+ 0.883	+ 0.002	...	...
239	" ..	+ 0.7686	+ 0.0010	...	+ 0.900	+ 0.112	...	...
240	" ..	+ 0.5576	+ 0.0005	...	+ 1.025	+ 0.061	...	...
241	13 Geminorum μ ..	+ 3.0268	- 0.0008	+ 0.005	+ 1.288	+ 0.627	+ 0.14	2017
242	2273 Lacaille	+ 0.3416	- 0.0014	...	+ 1.492	+ 0.049	...	...
243	2286 Lacaille	+ 0.3686	- 0.0017	...	+ 1.643	+ 0.053	...	2078
244	α Argus (Compus) ..	+ 1.3292	+ 0.0010	0.000	+ 1.530	+ 0.102	0.00	2096
245	" ..	+ 2.0017	+ 0.0018	...	+ 1.931	+ 0.290	...	...

217—223—230—231—234—Proper Motions adopted from "Greenwich Catalogue"

245—Proper Motions adopted from "St. Louis Catalogue"

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
246	2312 Lacaille	7.3	1	6	22	8.95	153	36	33.9	1	0.18
247	2524 Taylor	7.2	1	6	23	27.42	131	3	3.0	1	0.09
248	2541 Taylor	6.4	2	6	24	54.07	147	54	59.3	2	0.07
249	... ..	9.0	2	6	27	30.56	152	27	51.6	2	0.13
250	... ..	9.0	2	6	27	45.52	131	5	17.2	2	0.10
251	... ..	9.0	2	6	28	24.30	130	55	47.3	2	0.11
252	... ..	8.6	2	6	28	39.22	151	10	1.3	2	0.17
253	24 Geminorum γ	2.5	...	6	29	51.26	73	29	18.1	9	0.31
254	... ..	8.8	1	6	33	33.10	152	27	3.8	1	0.19
255	... ..	7.7	1	6	34	30.70	130	27	55.6	1	0.09
256	51 Cephei (<i>Hev.</i>)	5.3	...	6	35	39.16	2	45	19.4	15	0.26
257	2652 Taylor	7.0	2	6	36	32.83	151	24	49.6	2	0.11
258	... ..	9.3	1	6	37	53.05	153	20	37.4	1	0.18
259	2667 Taylor	8.1	1	6	33	22.76	148	59	39.8	1	0.18
260	... ..	8.6	1	6	39	7.42	131	3	25.0	1	0.17
261	9 Canis Majoris α (<i>Sirius</i>)	1.0	...	6	39	9.21	106	31	56.6	3	0.09
262	... ..	8.4	3	6	40	29.47	131	2	27.1	3	0.17
263	2734 Taylor	8.6	2	6	44	53.34	144	36	1.6	2	0.20
264	... ..	9.6	2	6	46	32.81	130	10	6.9	2	0.15
265	α Pictoris	5.0	2	6	46	47.58	151	47	46.1	2	0.11
266	2500 Lacaille	7.9	2	6	47	0.05	130	23	20.6	2	0.12
267	2532 Lacaille	6.8	3	6	48	12.87	150	5	32.5	3	0.18
268	... ..	9.3	3	6	48	50.56	130	10	17.0	2	0.13
269	... ..	9.0	1	6	49	43.02	129	8	19.7	1	0.09
270	... ..	10.7	2	6	50	25.88	75	17	25.1	2	0.08
271	21 Canis Majoris ϵ	1.7	...	6	53	16.69	118	47	31.4	7	0.11
272	... ..	9.0	3	6	53	47.80	129	47	31.6	3	0.15
273	3 Geminorum (1st)	6.2	1	6	56	1.73	69	12	29.9	1	0.09
274	43 Geminorum 3 Var. 1	4.3	...	6	56	2.48	69	14	1.9	5	0.09
275	2525 Taylor	8.9	2	6	56	52.03	150	54	38.0	2	0.13
276	23 Canis Majoris γ	4.3	...	6	57	36.31	105	26	5.6	4	0.12
277	... ..	9.1	2	6	58	23.20	66	56	5.7	2	0.14
278	... ..	9.0	1	6	59	11.80	66	59	54.9	1	0.18
279	... ..	9.3	1	6	59	48.03	129	43	4.3	1	0.07
280	2851 Taylor	7.8	2	7	0	49.81	145	44	48.1	2	0.19

270.—Observed by mistake for Pomona.

274.—3 Geminorum Var. 1.—Period 10.16 days.—Range, 3.7 to 4.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
246	2312 Lacaille ..	+ 0.3903	- 0.0025	..	+ 1.035	+ 0.056	..	..
247	2524 Taylor ..	+ 1.0139	+ 0.0018	..	+ 2.049	+ 0.277	..	..
248	2541 Taylor ...	+ 0.9520	- 0.0006	..	+ 2.176	+ 0.137	..	2124
249	... ..	+ 0.5260	- 0.0030	..	+ 2.401	+ 0.075	..	..
250	... ..	+ 1.0148	+ 0.0016	..	+ 2.424	+ 0.276	..	..
251	... ..	+ 1.0216	+ 0.0016	..	+ 2.479	+ 0.277	..	..
252	... ..	+ 0.6624	- 0.0025	..	+ 2.501	+ 0.095	..	..
253	24 Geminorum γ ..	+ 3.4650	- 0.0015	+ 0.001	+ 2.605	+ 0.500	+ 0.04	2163
254	... ..	+ 0.5364	- 0.0043	..	+ 2.925	+ 0.076	..	..
255	... ..	+ 1.0445	+ 0.0015	..	+ 3.008	+ 0.279	..	..
256	51 Cephei (Her) ..	+ 30.5188	- 1.8259	- 0.027	+ 3.107	+ 4.396	+ 0.08	2157
257	2632 Taylor ...	+ 0.6495	- 0.0042	..	+ 3.185	+ 0.092	..	2208
258	... ..	+ 0.4451	- 0.0031	..	+ 3.300	+ 0.063	..	..
259	2667 Taylor ...	+ 0.8785	- 0.0029	..	+ 3.343	+ 0.125	..	..
260	... ..	+ 1.9244	+ 0.0014	..	+ 3.407	+ 0.276	..	..
261	9 Canis Majoris α ..	+ 2.6808	+ 0.0010	- 0.035	+ 3.409	+ 0.384	+ 1.24	2213
262	... ..	+ 1.9263	+ 0.0013	..	+ 3.524	+ 0.276	..	..
263	2724 Taylor ..	+ 1.2266	- 0.0014	..	+ 3.603	+ 0.173	..	..
264	... ..	+ 1.9667	+ 0.0013	..	+ 4.045	+ 0.279	..	..
265	α Pictoris	+ 0.6308	- 0.0063	- 0.010	+ 4.066	+ 0.088	- 0.19	2260
266	2500 Lacaille ..	+ 1.9585	+ 0.0012	..	+ 4.084	+ 0.278	..	..
267	2532 Lacaille ...	+ 0.7090	- 0.0050	..	+ 4.188	+ 0.112	..	..
268	... ..	+ 1.9680	+ 0.0012	..	+ 4.241	+ 0.279	..	..
269	... ..	+ 2.6005	+ 0.0013	..	+ 4.316	+ 0.284	..	..
270	... ..	+ 3.4146	- 0.0031	..	+ 4.378	+ 0.484	..	..
271	21 Canis Majoris ϵ ..	+ 2.3571	+ 0.0013	0.000	+ 4.620	+ 0.332	+ 0.02	2293
272	... ..	+ 1.9890	+ 0.0012	..	+ 4.664	+ 0.280	..	..
273	5 Geminorum (1st) ..	+ 3.3647	- 0.0060	..	+ 4.553	+ 0.603	..	..
274	43 Geminorum 3 Var 1	+ 3.5640	- 0.0050	- 0.001	+ 4.555	+ 0.508	+ 0.01	2305
275	2525 Taylor	+ 0.7426	- 0.0090	..	+ 4.925	+ 0.108	..	..
276	23 Canis Majoris γ ..	+ 2.7144	+ 0.0005	+ 0.002	+ 4.988	+ 0.381	+ 0.01	2319
277	... ..	+ 3.6230	- 0.0058	..	+ 5.064	+ 0.509	..	..
278	... ..	+ 3.6209	- 0.0059	..	+ 5.123	+ 0.509	..	..
279	... ..	+ 1.0920	+ 0.0011	..	+ 5.176	+ 0.280	..	..
280	2551 Taylor	+ 1.1774	- 0.0033	..	+ 5.261	+ 0.164	..	..

265.—Proper Motions adopted from "Stene's Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
281	R Canis Minoris Var. 1 ...	9.2	1	7	1	13.77	79	45	50.6	1	0.08
282	2882 Taylor ...	8.9	4	7	3	26.00	151	1	2.7	4	0.13
283	... ..	9.3	1	7	4	58.07	130	42	33.2	1	0.07
284	2899 Taylor ...	8.9	1	7	5	47.76	130	8	40.2	1	0.09
285	... ..	9.5	1	7	5	51.92	129	23	13.1	1	0.08
286	2678 Lacaille ...	8.5	1	7	6	10.50	148	0	13.4	1	0.18
287	... ..	8.2	1	7	6	38.61	129	2	41.0	1	0.07
288	... ..	9.3	2	7	7	59.43	148	46	1.9	2	0.07
289	... ..	8.9	2	7	8	9.13	152	5	1.8	2	0.12
290	2940 Taylor ...	9.0	1	7	9	27.96	129	57	41.1	1	0.08
291	54 Geminorum A ...	4.3	...	7	10	16.45	73	13	3.6	3	0.16
292	... ..	9.8	1	7	10	16.00	131	52	8.3	1	0.07
293	55 Geminorum δ ...	3.5	...	7	11	59.93	67	46	15.7	10	0.12
294	... ..	9.2	1	7	13	1.19	129	15	59.3	1	0.07
295	... ..	8.7	1	7	14	30.70	138	49	35.4	1	0.07
296	3005 Taylor ...	8.7	2	7	15	28.50	149	0	54.3	2	0.19
297	2805 Lacaille ...	8.3	1	7	17	21.21	153	8	4.0	1	0.18
298	... ..	9.2	1	7	18	4.08	129	42	31.1	1	0.09
299	3043 Taylor ...	7.0	1	7	19	13.59	129	16	24.8	1	0.13
300	... ..	9.0	...	7	19	35.74	123	7	59.6	1	0.06
301	63 Geminorum ...	5.5	1	7	19	39.51	68	16	48.8	2	0.05
302	3054 Taylor ...	7.4	2	7	20	2.06	151	41	28.6	2	0.14
303	... ..	7.7	1	7	21	34.23	131	50	25.7	1	0.09
304	6 Canis Minoris ...	5.5	...	7	22	13.39	77	42	55.1	1	0.13
305	... ..	9.8	1	7	23	24.08	51	57	26.3	1	0.07
306	... ..	9.0	1	7	24	58.41	123	8	19.2	1	0.17
307	8 Canis Minoris Var. 2 ..	8.3	1	7	25	20.43	81	23	41.7	1	0.08
308	63 Geminorum ...	5.4	...	7	25	50.63	73	53	3.7	4	0.36
309	63 Geminorum α ¹ (Castor)	1.7	...	7	25	55.06	57	49	1.8	3	0.14
310	... ..	8.9	1	7	26	5.18	142	5	53.7	1	0.04
311	... ..	9.0	3	7	26	48.29	123	7	22.5	3	0.18
312	... ..	9.3	1	7	27	13.25	153	10	42.2	1	0.18
313	3126 Taylor ...	7.1	1	7	29	34.20	143	15	44.3	1	0.09
314	10 Can. Min. α (Procyon) ..	1.0	...	7	32	10.86	84	23	46.3	7	0.15
315	2893 Lacaille ...	7.5	2	7	32	43.11	121	49	27.6	2	0.15

281.—R Canis Minoris Var. 1.—Period 335 days.—Range, 7.5 to 11th magnitude.

307.—8 Canis Minoris Var. 2.—Period 382 days.—Range, 8.5 magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
281	R Canis Minoris Var. 1	+ 3.3049	- 0.0031	...	+ 5.294	+ 0.463	...	...
282	2882 Taylor ...	+ 0.7503	- 0.0090	...	+ 5.491	+ 0.103	...	...
283	" ...	+ 1.0676	+ 0.0009	...	+ 5.609	+ 0.274	...	...
284	2899 Taylor ...	+ 1.9005	+ 0.0010	...	+ 5.678	+ 0.277	...	...
285	" ...	+ 2.0193	+ 0.0011	...	+ 5.695	+ 0.290	...	...
286	2678 Lacaille	+ 1.0087	- 0.0055	...	+ 5.711	+ 0.130	...	...
287	" ...	+ 2.0332	+ 0.0011	...	+ 5.750	+ 0.282	...	...
288	" ...	+ 0.9634	+ 0.0059	...	+ 5.863	+ 0.132	...	...
289	" ...	+ 0.6594	- 0.0102	...	+ 5.876	+ 0.089	...	...
290	2940 Taylor ...	+ 2.0028	+ 0.0010	...	+ 5.986	+ 0.276	...	...
291	54 Geminorum λ ...	+ 3.4565	- 0.0055	- 0.002	+ 6.054	+ 0.478	+ 0.04	2395
292	" ...	+ 1.9296	+ 0.0097	...	+ 6.054	+ 0.265	...	...
293	55 Geminorum δ ...	+ 3.5917	- 0.0072	0.000	+ 6.198	+ 0.495	+ 0.03	2410
294	" ...	+ 2.0341	+ 0.0009	...	+ 6.282	+ 0.279	...	...
295	" ...	+ 1.6234	- 0.0008	...	+ 6.406	+ 0.221	...	...
296	3005 Taylor ...	+ 0.9633	- 0.0071	...	+ 6.457	+ 0.130	...	...
297	2905 Lacaille	+ 0.5816	- 0.0132	...	+ 6.641	+ 0.077	...	...
298	" ...	+ 3.0255	+ 0.0010	...	+ 6.700	+ 0.275	...	...
299	3043 Taylor ...	+ 2.0435	+ 0.0009	...	+ 6.795	+ 0.277	...	...
300	" ...	+ 2.2515	+ 0.0013	...	+ 6.826	+ 0.306	...	...
301	63 Geminorum ...	+ 3.5728	- 0.0078	- 0.004	+ 6.832	+ 0.487	+ 0.10	2460
302	3054 Taylor ...	+ 0.7398	- 0.0111	...	+ 6.864	+ 0.098	...	...
303	" ...	+ 1.9500	+ 0.0006	...	+ 6.988	+ 0.264	...	...
304	6 Canis Minoris	+ 3.3446	- 0.0052	+ 0.004	+ 7.042	+ 0.453	0.00	2473
305	" ...	+ 4.0499	- 0.0165	...	+ 7.199	+ 0.519	...	...
306	" ...	+ 2.2595	+ 0.0011	...	+ 7.267	+ 0.304	...	...
307	8 Canis Minoris Var. 2	+ 3.2605	- 0.0044	...	+ 7.298	+ 0.440	...	...
308	68 Geminorum ...	+ 3.4316	- 0.0066	- 0.001	+ 7.338	+ 0.463	0.00	2486
309	66 Gem. α^3 (Castor) ...	+ 3.5550	- 0.0133	- 0.013	+ 7.344	+ 0.519	+ 0.08	2485
310	" ...	+ 1.4744	- 0.0024	...	+ 7.357	+ 0.107	...	...
311	" ...	+ 2.2616	+ 0.0011	...	+ 7.416	+ 0.308	...	...
312	" ...	+ 0.6169	- 0.0146	...	+ 7.449	+ 0.081	...	...
313	3126 Taylor ...	+ 1.4160	- 0.0032	...	+ 7.640	+ 0.198	...	2507
314	10 Can. Min. (Procyon)	+ 3.1920	- 0.0041	- 0.005	+ 7.850	+ 0.425	+ 1.08	2522
315	2993 Lacaille	+ 2.3093	+ 0.0012	...	+ 7.894	+ 0.307	...	...

291.—304.—Proper Motions adopted from "Greenwich Catalogues."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
316	2910 Lacaille	7.7	1	7	33	17.38	143	52	51.3	1	0.14
317	... ..	9.9	1	7	35	10.00	66	15	55.0	1	0.09
318	... ..	8.9	1	7	35	19.80	152	59	34.8	1	0.18
319	... ..	8.6	1	7	35	20.22	144	19	41.9	1	0.04
320	78 Geminorum β (Pollux) ..	1.3	...	7	36	59.42	61	38	56.1	6	0.14
321	2971 Lacaille	7.6	2	7	40	18.27	143	54	58.3	2	0.15
322	T Geminorum Var. 4	10.4	1	7	41	8.37	65	55	48.7	1	0.09
323	... ..	8.5	1	7	41	18.45	151	34	30.1	1	0.19
324	... ..	8.7	1	7	41	32.28	144	18	41.3	1	0.15
325	3013 Lacaille	7.0	2	7	43	29.04	142	0	43.2	2	0.14
326	49 R. P. L.	6.5	...	7	43	55.24	5	33	41.3	3	0.34
327	3034 Lacaille	8.8	1	7	44	4.63	153	51	39.1	1	0.18
328	3031 Lacaille	7.7	3	7	45	5.13	144	22	27.0	3	0.12
329	3290 Taylor	8.3	1	7	46	18.09	144	27	57.2	1	0.07
330	1791 Brisbane	8.3	1	7	46	19.63	144	24	39.2	1	0.07
331	... ..	8.5	2	7	46	29.45	144	22	26.6	2	0.17
332	... ..	9.1	2	7	48	28.61	67	46	6.7	2	0.15
333	3310 Taylor	7.0	1	7	48	32.66	149	17	52.9	1	0.20
334	... ..	9.5	1	7	48	59.01	130	26	3.1	1	0.10
335	... ..	6.9	1	7	49	29.60	152	34	55.6	1	0.15
336	... ..	8.8	1	7	50	4.76	129	38	25.7	1	0.19
337	3339 Taylor	8.6	1	7	51	50.10	144	16	56.4	1	0.12
338	... ..	8.7	1	7	52	54.08	144	41	42.0	1	0.16
339	5 Cancri	6.0	2	7	53	45.22	73	10	23.6	2	0.06
340	6 Cancri	5.5	...	7	53	9.70	61	49	40.3	4	0.13
341	3373 Taylor	7.9	2	7	55	13.81	144	11	52.5	2	0.16
342	... ..	8.0	1	7	55	20.11	128	30	12.2	1	0.21
343	1955 Brisbane	6.9	2	7	55	28.07	152	55	47.2	2	0.15
344	3380 Taylor	7.8	3	7	55	47.96	144	10	33.8	3	0.14
345	... ..	9.8	1	7	56	31.51	129	21	20.2	1	0.09
346	3154 Lacaille	5.6	3	7	58	36.73	153	11	28.7	3	0.14
347	12 Cancri	6.0	2	8	1	6.48	75	57	58.6	2	0.06
348	3174 Lacaille	7.2	2	8	1	25.69	155	37	56.0	2	0.22
349	15 Argus	3.0	...	8	1	45.15	113	54	51.6	9	0.14
350	... ..	9.1	1	8	2	2.82	113	46	47.6	1	0.12

322.—T Geminorum Var. 4.—Period 228 days.—Range, 8.5 magnitude to invisibility.
 326.—1350 Groombridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
316	2910 Lacaille ...	+ 1.3826	- 0.0037	...	+ 7.940	+ 0.183	...	...
317	... ..	+ 3.6100	- 0.0131	...	+ 8.020	+ 0.479	...	...
318	... ..	+ 0.6726	- 0.0152	...	+ 8.103	+ 0.087	...	...
319	... ..	+ 1.3649	- 0.0041	...	+ 8.116	+ 0.179	...	...
320	78 Gem. β (Pollux) ...	+ 3.7298	- 0.0128	- 0.010	+ 8.236	+ 0.401	+ 0.06	2555
321	2971 Lacaille ...	+ 1.4105	- 0.0038	...	+ 8.500	+ 0.182	...	...
322	T Geminorum Var. 4 ...	+ 3.6121	- 0.0110	...	+ 8.505	+ 0.472	...	...
323	... ..	+ 0.8393	- 0.0128	...	+ 8.579	+ 0.107	...	...
324	... ..	+ 1.3903	- 0.0061	...	+ 8.598	+ 0.179	...	...
325	3013 Lacaille ...	+ 1.5317	- 0.0026	...	+ 8.751	+ 0.197	...	...
326	49 R. P. L. ...	+ 15.4159	- 1.2230	...	+ 8.785	+ 2.017	...	2556
327	3034 Lacaille ...	+ 0.6237	- 0.0180	...	+ 8.797	+ 0.078	...	...
328	3031 Lacaille ...	+ 1.3990	- 0.0042	...	+ 8.877	+ 0.179	...	...
329	3290 Taylor ...	+ 1.3977	- 0.0043	...	+ 8.972	+ 0.178	...	...
330	1791 Brisbane ...	+ 1.4012	- 0.0043	...	+ 8.973	+ 0.179	...	...
331	... ..	+ 1.4041	- 0.0042	...	+ 8.987	+ 0.179	...	...
332	... ..	+ 3.5585	- 0.0109	...	+ 9.141	+ 0.458	...	...
333	3310 Taylor ...	+ 1.0684	- 0.0095	...	+ 9.148	+ 0.135	...	...
334	... ..	+ 2.0593	+ 0.0010	...	+ 9.181	+ 0.263	...	...
335	... ..	+ 0.7832	- 0.0153	...	+ 9.221	+ 0.098	...	...
336	... ..	+ 2.0897	+ 0.0011	...	+ 9.266	+ 0.266	...	...
337	3330 Taylor ...	+ 1.4297	- 0.0041	...	+ 9.403	+ 0.180	...	...
338	... ..	+ 1.4096	- 0.0044	...	+ 9.485	+ 0.177	...	...
339	5 Cancri ...	+ 3.4277	- 0.0020	- 0.001	+ 9.551	+ 0.436	0.00	2664
340	6 Cancri ...	+ 3.6095	- 0.0148	- 0.005	+ 9.659	+ 0.468	+ 0.07	2672
341	3373 Taylor ...	+ 1.4478	- 0.0041	...	+ 9.664	+ 0.181	...	...
342	... ..	+ 2.1404	+ 0.0013	...	+ 9.673	+ 0.270	...	...
343	1855 Brisbane ...	+ 0.7811	- 0.0165	...	+ 9.683	+ 0.066	...	2680
344	3390 Taylor ...	+ 1.4513	- 0.0040	...	+ 9.704	+ 0.181	...	...
345	... ..	+ 2.1143	+ 0.0013	...	+ 9.763	+ 0.265	...	...
346	3154 Lacaille ...	+ 0.7728	- 0.0173	...	+ 9.822	+ 0.004	...	2713
347	12 Cancri ...	+ 3.3607	- 0.0083	- 0.001	+ 10.110	+ 0.419	+ 0.02	2720
348	3174 Lacaille ...	+ 0.5349	- 0.0346	...	+ 10.125	+ 0.062	...	...
349	15 Argus ...	+ 2.5608	+ 0.0009	- 0.007	+ 10.160	+ 0.318	- 0.06	2728
350	... ..	+ 2.5645	+ 0.0009	...	+ 10.182	+ 0.318	...	...

339.—347.—Proper motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	"	"	"		
351	3200 Lacaille	0.9	2	8	4	47.63	153	7	24.3	2	0.18
352	... ..	8.6	1	8	5	19.41	130	45	22.9	1	0.09
353	... ..	10.1	2	8	5	20.10	77	37	34.8	2	0.23
354	... ..	9.0	3	8	5	26.43	77	24	57.4	3	0.23
355	... ..	9.7	3	8	8	19.71	77	26	31.1	3	0.24
356	R Cancri Var. 1	8.0	2	8	9	3.87	77	51	33.0	2	0.19
357	... ..	9.2	3	8	9	7.45	77	27	27.9	3	0.24
358	... ..	9.7	1	8	9	55.34	74	16	13.7	1	0.09
359	... ..	9.9	3	8	10	28.84	77	37	47.6	3	0.22
360	16224 Lalande	8.5	1	8	10	33.55	73	54	11.0	1	0.07
361	... ..	8.8	1	8	12	17.13	128	43	38.1	1	0.10
362	... ..	8.9	1	8	12	45.20	128	40	53.7	1	0.10
363	... ..	9.7	1	8	12	57.45	130	45	32.2	1	0.13
364	... ..	9.2	2	8	13	20.63	131	41	13.8	2	0.15
365	... ..	9.6	1	8	13	42.30	133	17	18.1	1	0.12
366	... ..	9.7	1	8	14	30.56	154	5	5.7	1	0.18
367	... ..	9.3	1	8	16	23.78	77	31	46.7	1	0.20
368	... ..	8.6	1	8	17	22.71	77	49	9.1	1	0.19
369	... ..	9.0	1	8	17	23.61	141	15	52.4	1	0.12
370	V111 459 W. B. N.	8.7	3	8	20	17.12	74	27	21.4	3	0.13
371	29 Cancri	6.0	...	8	21	2.13	75	20	30.1	1	0.13
372	... ..	9.0	3	8	23	7.81	73	25	24.7	3	0.19
373	3620 Taylor	8.0	1	8	23	10.60	130	47	47.6	1	0.12
374	... ..	8.6	1	8	23	32.12	128	38	35.7	1	0.25
375	31 Cancri θ	5.3	...	8	23	50.24	71	26	55.9	1	0.06
376	... ..	9.5	4	8	24	44.63	73	45	40.7	4	0.17
377	33 Cancri η	5.7	...	8	24	50.41	60	5	59.4	9	0.16
378	3051 Taylor	7.8	1	8	25	39.62	130	3	20.0	1	0.10
379	3052 Taylor	8.2	2	8	25	43.63	130	2	28.3	2	0.16
380	3393 Lacaille	7.9	2	8	25	56.92	149	40	8.6	2	0.12
381	... ..	9.1	1	8	26	25.43	130	30	29.1	1	0.27
382	VIII 635 W. B. N.	9.0	4	8	27	39.93	73	48	19.4	4	0.17
383	U Cancri Var. 4	9.7	2	8	27	59.98	70	38	20.4	2	0.10
384	3672 Taylor	7.2	2	8	28	29.05	74	13	7.8	3	0.13
385	16890 Lalande	8.9	3	8	28	41.64	73	12	52.3	3	0.26

356.—R Cancri Var. 1.—Period 354 days.—Range, 6th to 12th magnitude.

358.—360.—Comparison stars for Ariadne in 1863.

370.—Comparison star for new variable star W Cancri Var. 5.

372.—376.—382.—384.—385.—Comparison stars for Proia

383.—U Cancri Var. 4.—Period 306 days.—Range, 9th magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in M. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
351	3200 Lacaille ...	+ 0.8156	- 0.0172	...	+ 10.358	+ 0.008	...	...
352	... ..	+ 2.0878	+ 0.0013	...	+ 10.428	+ 0.226	...	...
353	... ..	+ 3.3198	- 0.0080	...	+ 10.429	+ 0.410	...	...
354	... ..	+ 3.3270	- 0.0081	...	+ 10.437	+ 0.410	...	...
355	... ..	+ 3.3245	- 0.0081	...	+ 10.651	+ 0.406	...	...
356	R Cancri Var. 1 ...	+ 3.3153	- 0.0080	...	+ 10.707	+ 0.404	...	...
357	... ..	+ 3.3236	- 0.0082	...	+ 10.711	+ 0.405	...	...
358	... ..	+ 3.3597	- 0.0096	...	+ 10.770	+ 0.412	...	...
359	... ..	+ 3.3191	- 0.0082	...	+ 10.811	+ 0.408	...	...
360	16224 Lalande ...	+ 3.3970	- 0.0097	...	+ 10.817	+ 0.412	...	...
361	... ..	+ 2.1736	+ 0.0018	...	+ 10.944	+ 0.261	...	...
362	... ..	+ 2.1763	+ 0.0018	...	+ 10.978	+ 0.261	...	...
363	... ..	+ 2.1083	+ 0.0013	...	+ 10.993	+ 0.252	...	...
364	... ..	+ 2.0773	+ 0.0015	...	+ 11.021	+ 0.248	...	...
365	... ..	+ 2.0209	+ 0.0013	...	+ 11.047	+ 0.241	...	...
366	... ..	+ 0.7810	- 0.0198	...	+ 11.106	+ 0.020	...	...
367	... ..	+ 3.3169	- 0.0085	...	+ 11.246	+ 0.395	...	...
368	... ..	+ 3.3104	- 0.0084	...	+ 11.314	+ 0.394	...	...
369	... ..	+ 1.6861	- 0.0014	...	+ 11.315	+ 0.190	...	...
370	VIII 459 W. R. N. ...	+ 3.3765	- 0.0100	...	+ 11.523	+ 0.398	...	...
371	29 Cancri	+ 3.3576	- 0.0096	- 0.002	+ 11.577	+ 0.395	+ 0.01	2836
372	... ..	+ 3.3949	- 0.0109	...	+ 11.726	+ 0.397	...	...
373	3620 Taylor	+ 2.1361	+ 0.0020	...	+ 11.730	+ 0.248	...	...
374	... ..	+ 2.2000	+ 0.0023	...	+ 11.755	+ 0.256	...	...
375	31 Cancri θ	+ 3.4353	- 0.0116	- 0.006	+ 11.777	+ 0.401	+ 0.06	2853
376	... ..	+ 3.3864	- 0.0106	...	+ 11.841	+ 0.394	...	...
377	33 Cancri η	+ 3.4839	- 0.0129	- 0.005	+ 11.818	+ 0.401	+ 0.06	2867
378	8651 Taylor	+ 2.1674	+ 0.0022	...	+ 11.903	+ 0.249	...	...
379	3652 Taylor	+ 2.1681	+ 0.0022	...	+ 11.910	+ 0.249	...	...
380	3393 Lacaille	+ 1.2348	- 0.0086	...	+ 11.926	+ 0.140	...	...
381	... ..	+ 2.1352	+ 0.0022	...	+ 11.989	+ 0.247	...	...
382	VIII 635 W. R. N. ...	+ 3.3525	- 0.0107	...	+ 12.045	+ 0.390	...	...
383	U Cancri Var. 4 ...	+ 3.4173	- 0.0124	...	+ 12.098	+ 0.397	...	...
384	3672 Taylor	+ 3.3734	- 0.0106	...	+ 12.104	+ 0.387	...	2888
385	16890 Lalande	+ 3.3934	- 0.0110	...	+ 12.119	+ 0.389	...	...

371.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimation.	Mean Right Ascension.			Mean Polar Distance.			Observations	Fraction of Year.	
				h.	m.	s.	°	'	"			
386	VIII 694 W. B. N.	...	8.9	1	8	29	120	70	39	54.4	1	0.27
387	VIII 699 W. B. N.	...	9.0	1	8	29	31.11	70	39	37.1	1	0.25
388	... ..	...	9.4	1	8	31	12.43	129	45	24.0	1	0.16
389	3710 Taylor	...	8.2	1	8	31	24.29	141	21	4.0	1	0.15
390	... ..	...	8.6	1	8	33	9.73	129	23	27.0	1	0.20
391	VIII 852 W. B. N.	...	8.9	3	8	34	1.84	74	7	39.7	3	0.13
392	... ..	...	9.0	3	8	34	39.45	129	46	11.8	3	0.18
393	3491 Lacaille	...	7.9	1	8	36	1.13	152	21	51.3	1	0.27
394	S Cancri Var. 2	...	8.3	1	8	36	9.77	70	28	48.0	1	0.27
395	3767 Taylor	...	7.6	1	8	36	19.67	142	50	15.2	1	0.19
396	47 Cancri δ	...	4.3	...	8	36	57.18	71	20	55.9	1	0.95
397	... ..	...	9.2	1	8	37	16.10	136	8	32.1	1	0.26
398	17231 Lalande	...	7.9	2	8	37	44.14	74	27	41.3	3	0.14
399	... ..	...	8.3	2	8	37	50.55	136	5	33.6	2	0.20
400	VIII 977 W. B. N.	...	9.5	3	8	39	15.23	74	49	0.5	3	0.12
401	11 Hydree	...	3.5	...	8	39	34.29	83	5	4.5	6	0.18
402	... ..	...	8.5	1	8	40	29.34	129	15	34.0	1	0.15
403	VIII 1043 W. B. N.	...	8.3	3	8	42	21.48	74	39	54.4	3	0.11
404	... ..	...	8.7	2	8	45	46.03	86	27	12.1	2	0.26
405	60 R. P. L.	...	6.5	...	8	46	23.08	5	16	53.9	6	0.40
406	S Hydree Var. 3	...	8.8	2	8	46	28.36	86	25	13.4	2	0.23
407	3886 Taylor	...	7.9	3	8	48	14.02	136	52	52.8	3	0.17
408	T Hydree Var. 4	...	9.9	2	8	49	2.74	90	37	29.2	2	0.23
409	... ..	...	7.7	1	8	49	13.13	132	54	19.8	1	0.19
410	... ..	...	7.6	1	8	49	20.12	132	59	0.7	1	0.17
411	9 Ursa Majoris	...	3.0	...	8	49	52.84	41	25	37.7	4	0.15
412	... ..	...	8.0	1	8	50	15.28	132	56	55.1	1	0.18
413	... ..	...	9.8	1	8	50	46.62	98	44	16.3	1	0.13
414	VIII 1302 W. B. N.	...	9.0	1	8	50	49.33	98	53	46.7	1	0.23
415	... ..	...	9.2	3	8	50	58.52	98	35	9.3	2	0.17
416	65 Cancri α	...	4.7	...	8	51	2.70	77	37	6.1	2	0.21
417	... ..	...	9.3	2	8	54	9.86	142	41	8.8	2	0.19
418	... ..	...	8.4	1	8	54	20.33	130	34	53.3	1	0.28
419	3941 Taylor	...	8.5	1	8	54	59.75	144	6	23.4	1	0.10
420	... ..	...	8.1	1	8	55	39.30	146	55	41.0	1	0.27

391.—398.—400.—403.—Comparison stars for the planet Freja.

394.—S Cancri Var. 2.—Period 9.48 days.—Range, 8th to 10th magnitude.

405.—1296 Carrington.

406.—S Hydree Var. 3.—Period 256 days.—Range, 8th to 13th magnitude.

408.—T Hydree Var. 4.—Period 290 days.—Range, 7th to 12th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
386	VIII 684 W. B. N. ...	+ 3.4453	- 0.0124	...	+ 12.141	+ 0.396	...	...
387	VIII 699 W. B. N. ...	+ 3.4449	- 0.0124	...	+ 12.173	+ 0.394	...	...
388	... ..	+ 2.1933	+ 0.0014	...	+ 12.293	+ 0.222	...	...
389	3710 Taylor ...	+ 1.7519	- 0.0006	...	+ 12.306	+ 0.197	...	...
390	... ..	+ 2.2104	+ 0.0026	...	+ 12.427	+ 0.248	...	...
391	VIII 852 W. B. N. ...	+ 3.3696	- 0.0109	...	+ 12.487	+ 0.379	...	...
392	... ..	+ 2.2031	+ 0.0027	...	+ 12.529	+ 0.246	...	...
393	3491 Lacaille ...	+ 1.0877	- 0.0141	...	+ 12.623	+ 0.118	...	2940
394	S Cancri Var. 2 ...	+ 3.4402	- 0.0130	...	+ 12.632	+ 0.385	...	...
395	3767 Taylor ...	+ 1.2862	- 0.0089	...	+ 12.643	+ 0.141	...	...
396	47 Cancri 3 ...	+ 3.4216	- 0.0125	- 0.002	+ 12.686	+ 0.382	+ 0.24	2963
397	... ..	+ 1.9961	+ 0.0019	...	+ 12.707	+ 0.220	...	...
398	17231 Lalande ...	+ 3.3592	- 0.0109	...	+ 12.738	+ 0.373	...	...
399	... ..	+ 1.9997	+ 0.0019	...	+ 12.746	+ 0.220	...	...
400	VIII 977 W. B. N. ...	+ 3.3508	- 0.0108	...	+ 12.841	+ 0.369	...	...
401	11 Hydre e ...	+ 3.1964	- 0.0071	- 0.013	+ 12.862	+ 0.361	+ 0.04	2971
402	... ..	+ 2.2363	+ 0.0031	...	+ 12.924	+ 0.244	...	...
403	VIII 1043 W. B. N. ...	+ 3.3505	- 0.0109	...	+ 13.048	+ 0.365	...	...
404	... ..	+ 3.1342	- 0.0068	...	+ 13.276	+ 0.277	...	...
405	60 R. P. L. ...	+ 13.5924	- 1.7345	...	+ 13.314	+ 1.509	...	...
406	S Hydre Var. 3 ...	+ 3.1347	- 0.0059	...	+ 13.320	+ 0.336	...	...
407	3886 Taylor ...	+ 2.0120	+ 0.0025	...	+ 13.434	+ 0.212	...	...
408	T Hydre Var. 4 ...	+ 2.9220	- 0.0018	...	+ 13.488	+ 0.309	...	...
409	... ..	+ 2.1530	+ 0.0033	...	+ 13.493	+ 0.226	...	...
410	... ..	+ 2.1510	+ 0.0033	...	+ 13.506	+ 0.226	...	...
411	9 Urse Majoris ...	+ 4.1896	- 0.0443	- 0.047	+ 13.541	+ 0.443	+ 0.28	3043
412	... ..	+ 2.1559	+ 0.0034	...	+ 13.566	+ 0.226	...	...
413	... ..	+ 2.9210	- 0.0016	...	+ 13.599	+ 0.307	...	...
414	VIII 1302 W. B. N. ...	+ 2.9183	- 0.0016	...	+ 13.602	+ 0.307	...	...
415	... ..	+ 2.9233	- 0.0019	...	+ 13.613	+ 0.307	...	...
416	65 Cancri e ...	+ 2.2876	+ 0.0008	0.000	+ 13.616	+ 0.246	+ 0.04	3063
417	... ..	+ 1.5005	+ 0.0005	...	+ 13.515	+ 0.184	...	...
418	... ..	+ 2.2426	+ 0.0029	...	+ 13.426	+ 0.231	...	...
419	3941 Taylor ...	+ 1.7375	- 0.0008	...	+ 13.567	+ 0.177	...	...
420	... ..	+ 1.5992	+ 0.0027	...	+ 13.973	+ 0.161	...	...

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
421	... ..	9.5	1	8	56	43.30	129	18	12.4	1	0.15
422	... ..	9.0	...	8	58	5.43	146	49	41.4	1	0.24
423	... ..	9.0	1	8	58	9.40	146	18	23.9	1	0.27
424	... ..	8.9	3	8	59	6.04	145	38	9.23	8	0.21
425	76 Cancri α	5.5	...	9	0	22.78	78	47	12.3	3	0.16
426	... ..	8.2	2	9	1	3.51	150	1	31.8	2	0.19
427	... ..	8.0	1	9	1	50.14	128	57	10.7	1	0.21
428	3705 Lacaille	7.2	2	9	2	13.95	151	17	3.6	2	0.29
429	... ..	10.5	1	9	2	15.75	71	26	28.1	1	0.16
430	... ..	8.7	1	9	4	23.60	130	29	40.7	1	0.28
431	3713 Lacaille	8.8	1	9	4	34.83	143	49	12.4	1	0.21
432	4021 Taylor	7.1	2	9	5	31.14	138	44	11.5	2	0.18
433	... ..	7.7	1	9	6	26.92	142	29	27.7	1	0.27
434	... ..	8.8	1	9	6	80.83	138	41	30.2	1	0.15
435	... ..	8.6	3	9	8	14.25	148	14	15.1	8	0.18
436	88 Cancri	6.7	...	9	11	23.12	71	43	13.5	4	0.23
437	... ..	8.2	4	9	11	48.62	130	45	7.9	4	0.21
438	... ..	7.9	2	9	13	3.26	72	17	57.5	3	0.22
439	Argos	2.0	...	9	13	27.06	146	42	22.3	3	0.23
440	... ..	8.6	2	9	14	37.92	24	50	29.3	2	0.26
441	... ..	9.0	1	9	15	15.46	143	48	40.2	1	0.22
442	... ..	9.0	1	9	15	54.98	26	4	26.1	1	0.23
443	... ..	9.0	1	9	16	6.17	140	7	34.8	1	0.16
444	9881 O. A. N.	9.2	2	9	17	37.29	25	3	44.7	2	0.18
445	... ..	7.7	2	9	19	29.08	75	6	31.1	2	0.16
446	30 Hydra α Var. 1	2.3	...	9	20	54.21	98	4	15.5	6	0.21
447	3953 Lacaille	8.1	3	9	22	32.01	131	59	15.8	3	0.23
448	25 Ursa Majoris θ	3.3	...	9	23	44.56	37	42	15.9	2	0.19
449	3886 Lacaille	7.8	1	9	24	43.23	141	49	48.5	1	0.21
450	3987 Lacaille	8.1	2	9	24	55.01	140	0	31.7	2	0.24
451	... ..	9.0	3	9	26	42.19	145	2	26.6	2	0.23
452	... ..	9.0	1	9	26	55.57	144	58	8.4	1	0.25
453	... ..	8.3	1	9	27	55.54	128	45	23.6	1	0.27
454	4226 Taylor	7.0	1	9	28	37.63	146	29	23.0	1	0.15
455	... ..	8.2	1	9	29	54.88	128	46	55.4	1	0.15

440. - 442. - 444. - Comparison stars for Comet 2 of 1861.

446. - α Hydra Var. 1. - Supposed to vary irregularly from 2.0 to 2.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
421	.. ..	+ 2 2872	+ 0 0040	..	+ 13 076	+ 0 233	..	..
422	... ..	+ 1 6138	- 0 0024	..	+ 14 062	+ 0 162	..	..
423	... ..	+ 1 6428	- 0 0018	..	+ 14 060	+ 0 163	..	..
424	... ..	+ 1 6840	- 0 0010	..	+ 14 126	+ 0 169	..	..
425	76 Caneri & ...	+ 3 2592	- 0 0094	- 0 002	+ 14 204	+ 0 330	+ 0 00	3111
426	... ..	+ 1 4405	- 0 0062	..	+ 14 247	+ 0 142	..	..
427	... ..	+ 2 3140	+ 0 0044	..	+ 14 294	+ 0 231	..	..
428	3705 Lacaille	+ 1 3633	- 0 0063	..	+ 14 319	+ 0 133	..	..
429	... ..	+ 3 3864	- 0 0133	..	+ 14 320	+ 0 340	..	..
430	... ..	+ 2 2804	+ 0 0047	..	+ 14 450	+ 0 225	..	..
431	3713 Lacaille	+ 1 8055	+ 0 0010	..	+ 14 462	+ 0 176	..	..
432	4021 Taylor	+ 2 0209	+ 0 0037	..	+ 14 518	+ 0 197	..	..
433	.. ..	+ 1 8755	+ 0 0022	..	+ 14 575	+ 0 182	..	..
434	... ..	+ 2 0272	+ 0 0037	..	+ 14 578	+ 0 197	..	..
435	.. ..	+ 1 6000	- 0 0025	..	+ 14 682	+ 0 153	..	..
436	83 Caneri ..	+ 3 3694	- 0 0134	- 0 012	+ 14 867	+ 0 323	+ 0 16	3171
437	... ..	+ 2 3004	+ 0 0052	..	+ 14 893	+ 0 219	..	..
438	.. ..	+ 3 3561	- 0 0131	..	+ 14 966	+ 0 330	..	..
439	Argus	+ 1 6106	- 0 0022	- 0 003	+ 14 988	+ 0 150	+ 0 02	3186
440	... ..	+ 4 9798	- 0 1130	..	+ 15 056	+ 0 473	..	..
441	... ..	+ 1 8686	+ 0 0026	..	+ 15 093	+ 0 174	..	..
442	... ..	+ 4 9476	- 0 1123	..	+ 15 130	+ 0 403	..	..
443	... ..	+ 2 0225	+ 0 0045	..	+ 15 141	+ 0 186	..	..
444	9881 O. A. N.	+ 4 9325	- 0 1126	..	+ 15 229	+ 0 461	..	..
445	... ..	+ 3 3012	- 0 0116	..	+ 15 334	+ 0 303	..	..
446	30 Hydre & Var. 1 ...	+ 2 9506	- 0 0013	- 0 004	+ 15 415	+ 0 268	- 0 03	3223
447	3853 Lacaille	+ 2 3080	+ 0 0063	..	+ 15 504	+ 0 207	..	..
448	25 Urne Majoris & ..	+ 4 1620	- 0 0561	- 0 111	+ 15 571	+ 0 374	+ 0 57	3242
449	3886 Lacaille	+ 2 0057	+ 0 0052	..	+ 15 626	+ 0 176	..	..
450	3887 Lacaille	+ 2 0740	+ 0 0057	..	+ 15 636	+ 0 182	..	..
451	.. ..	+ 1 8962	+ 0 0037	..	+ 15 733	+ 0 164	..	..
452	.. ..	+ 1 8907	+ 0 0038	..	+ 15 745	+ 0 164	..	..
453	.. ..	+ 2 4110	+ 0 0066	..	+ 15 802	+ 0 210	..	..
454	4226 Taylor ..	+ 1 8332	+ 0 0030	..	+ 15 837	+ 0 157	..	..
455	.. ..	+ 2 4142	+ 0 0067	..	+ 15 882	+ 0 209	..	..

439.—Proper Motions taken from Mr Stone's list, "M. R. A. S." Vol. 42

Mean Positions of Stars for 1864 January 1st,

Number.	Star.				Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
							<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
456	...	...	...	...	8.3	2	9	29	1.32	128	49	33.9	2	0.17
457	4250 Taylor	...	...	...	5.3	1	9	31	57.68	138	44	48.5	1	0.17
458	...	...	...	...	8.8	3	9	32	27.63	129	53	53.7	3	0.21
459	...	...	...	...	7.8	1	9	32	54.20	129	47	34.1	1	0.21
460	14 Leonis ϵ	...	...	...	4.0	...	9	33	53.35	79	29	27.6	1	0.18
461	...	...	...	...	8.9	3	9	34	43.92	130	31	39.4	3	0.19
462	...	...	...	...	8.5	1	9	35	33.97	151	56	22.6	1	0.27
463	17 Leonis ϵ	...	...	...	3.0	...	9	38	7.54	65	36	6.1	8	0.19
464	R Leonis Var. 1	...	...	...	6.0	5	9	40	14.42	77	56	32.3	5	0.26
465	...	...	...	...	8.7	1	9	41	50.08	130	49	18.8	1	0.07
466	...	...	...	...	9.0	1	9	42	42.08	130	47	49.2	1	0.23
467	...	...	...	...	9.0	3	9	43	27.09	143	56	50.4	3	0.21
468	...	...	...	...	7.7	1	9	43	34.18	143	45	55.2	1	0.19
469	...	...	...	...	8.8	1	9	45	55.93	129	2	51.8	1	0.22
470	70 R. P. L.	...	...	...	6.5	...	9	46	18.04	5	25	49.2	3	0.21
471	...	...	...	...	9.2	2	9	46	26.54	129	6	56.4	2	0.18
472	IX 1057 W. H. E.	...	...	...	7.3	3	9	49	44.67	85	6	42.1	3	0.14
473	4402 Taylor	...	...	...	7.6	3	9	49	53.40	129	47	30.0	3	0.27
474	29 Leonis π	...	...	...	5.0	...	9	53	1.46	81	18	17.5	10	0.19
475	...	...	...	...	9.3	1	9	53	52.92	152	6	48.9	1	0.27
476	4415 Taylor	...	...	...	8.1	4	9	54	43.19	147	28	40.8	4	0.19
477	...	...	...	...	8.3	1	9	56	26.50	144	3	50.4	1	0.18
478	...	...	...	...	9.0	1	9	57	7.36	129	56	40.4	1	0.16
479	4476 Taylor	...	...	...	8.5	1	9	57	51.23	145	36	4.3	1	0.25
480	...	...	...	...	8.8	2	9	58	26.00	150	38	57.9	2	0.30
481	14 Sextantis	...	...	...	6.0	...	9	59	40.60	83	43	36.5	1	0.11
482	31 Leonis A	...	...	...	5.0	...	10	0	41.11	79	20	15.0	1	0.21
483	32 Leonis α (<i>Regulus</i>)	...	...	...	1.3	...	10	1	7.55	77	22	10.5	11	0.25
484	...	...	...	...	9.0	1	10	2	46.64	129	57	38.1	1	0.16
485	4538 Taylor	...	...	...	7.5	3	10	6	9.42	129	19	27.1	3	0.20
486	...	...	...	...	9.1	1	10	9	1.46	139	31	41.8	1	0.18
487	72 R. P. L.	...	...	...	5.9	...	10	9	20.72	5	3	38.2	3	0.48
488	4577 Taylor	...	...	...	8.8	2	10	9	47.74	128	36	58.0	2	0.25
489	...	...	...	...	9.0	1	10	10	15.97	130	51	9.0	1	0.28
490	41 Leonis γ	...	...	...	2.5	...	10	12	28.18	80	28	19.0	12	0.24

464.—R Leonis Var. 1.—Period 312 days.—Range, 5th to 10th magnitude.

470.—1451 Carryington.

472.—Comparison star for Asia in 1864.

487.—1020 Greenbridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
456	... ..	+ 2.4135	+ 0.0068	...	+ 15.838	+ 0.208	...	...
457	4259 Taylor ...	+ 2.1545	+ 0.0063	...	+ 16.014	+ 0.182	...	3300
458	... ..	+ 2.4011	+ 0.0072	...	+ 16.041	+ 0.208	...	...
459	... ..	+ 2.4054	+ 0.0072	...	+ 16.064	+ 0.208	...	...
460	14 Leonis ϵ ...	+ 3.2197	- 0.0093	- 0.013	+ 16.115	+ 0.273	+ 0.04	3312
461	... ..	+ 2.3939	+ 0.0075	...	+ 16.160	+ 0.200	...	...
462	... ..	+ 1.5939	- 0.0020	...	+ 16.208	+ 0.130	...	...
463	17 Leonis ϵ ...	+ 3.4230	- 0.0180	- 0.004	+ 16.334	+ 0.282	+ 0.02	3331
464	R Leonis Var. 1 ...	+ 3.2356	- 0.0101	...	+ 16.440	+ 0.263	...	3345
465	... ..	+ 2.4172	+ 0.0063	...	+ 16.620	+ 0.198	...	...
466	... ..	+ 2.4214	+ 0.0084	...	+ 16.562	+ 0.192	...	...
467	... ..	+ 2.0114	+ 0.0075	...	+ 16.599	+ 0.160	...	...
468	... ..	+ 2.0490	+ 0.0075	...	+ 16.605	+ 0.160	...	...
469	... ..	+ 2.4733	+ 0.0080	...	+ 16.720	+ 0.192	...	...
470	70 R. P. L. ...	+ 10.8196	- 1.5902	...	+ 16.738	+ 0.860	...	...
471	... ..	+ 2.4738	+ 0.0086	...	+ 16.745	+ 0.192	...	...
472	IX 1057 W. B. R. ...	+ 3.1337	- 0.0062	...	+ 16.903	+ 0.230	...	...
473	4402 Taylor ...	+ 2.4732	+ 0.0091	...	+ 16.909	+ 0.187	...	...
474	29 Leonis ν ...	+ 3.1706	- 0.0060	- 0.003	+ 17.065	+ 0.236	0.03	3415
475	... ..	+ 1.7509	+ 0.0084	...	+ 17.094	+ 0.127	...	...
476	4445 Taylor ...	+ 1.9321	+ 0.0083	...	+ 17.133	+ 0.143	...	...
477	... ..	+ 2.1261	+ 0.0102	...	+ 17.210	+ 0.162	...	...
478	... ..	+ 2.5001	+ 0.0099	...	+ 17.240	+ 0.179	...	...
479	4476 Taylor ...	+ 2.0799	+ 0.0100	...	+ 17.273	+ 0.147	...	...
480	... ..	+ 1.6603	+ 0.0067	...	+ 17.299	+ 0.131	...	...
481	14 Sextantis ...	+ 3.1456	- 0.0096	- 0.006	+ 17.355	+ 0.222	+ 0.01	3449
482	31 Leonis A ...	+ 3.1073	- 0.0091	- 0.009	+ 17.398	+ 0.225	+ 0.06	3457
483	32 Leonis α (<i>Regulus</i>)	+ 3.2505	- 0.0102	- 0.019	+ 17.417	+ 0.255	- 0.01	3459
484	... ..	+ 2.5238	+ 0.0106	...	+ 17.488	+ 0.172	...	...
485	4538 Taylor ...	+ 2.5508	+ 0.0160	...	+ 17.631	+ 0.169	...	...
486	... ..	+ 2.3340	+ 0.0131	...	+ 17.749	+ 0.180	...	...
487	72 R. P. L. ...	+ 10.0817	- 1.6686	- 0.079	+ 17.762	+ 0.675	+ 0.06	3495
488	4577 Taylor ...	+ 2.5782	+ 0.0112	...	+ 17.781	+ 0.166	...	...
489	... ..	+ 2.3419	+ 0.0134	...	+ 17.800	+ 0.149	...	...
490	41 Leonis γ ...	+ 3.2263	- 0.0148	+ 0.019	+ 17.988	+ 0.298	+ 0.15	3523

[81.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations	Mean Right Ascension.			Mean Polar Distance.			Observations	Fraction of Year
				<i>h.</i>	<i>m.</i>	<i>s.</i>	"	"	"		
491	43 Leonis ...	6.5	...	10	15	53.40	82	46	5.1	2	0.07
492	... ..	9.2	2	10	16	8.20	75	24	30.6	2	0.26
493	... ..	8.9	2	10	16	11.79	129	16	16.5	2	0.17
494	4653 Taylor	8.4	1	10	18	1.94	151	23	10.5	1	0.18
495	45 Leonis ...	6.0	...	10	20	27.87	79	32	44.1	3	0.14
496	... ..	9.0	1	10	21	55.82	146	59	1.4	1	0.28
497	30 Sextantis	6.0	...	10	23	20.43	89	56	25.8	2	0.22
498	... ..	10.0	1	10	23	22.20	76	5	17.7	2	0.21
499	47 Leonis ρ	4.3	..	10	25	38.66	79	59	41.4	10	0.26
500	... ..	9.2	1	10	29	12.38	147	54	36.6	1	0.28
501	... ..	9.6	2	10	34	52.15	139	16	38.4	2	0.30
502	... ..	9.2	1	10	35	22.25	137	19	31.7	1	0.32
503	36 Sextantis	6.0	...	10	38	8.01	86	47	51.7	1	0.22
504	... ..	8.0	3	10	38	47.07	144	50	21.1	3	0.28
505	η Argus Var. 1	...	..	10	39	47.45	148	58	13.4	3	0.23
506	... ..	9.0	1	10	41	25.52	146	23	11.9	1	0.20
507	53 Leonis l	6.0	...	10	42	6.36	78	44	10.3	11	0.26
508	4886 Taylor	7.0	1	10	42	47.47	137	2	0.2	1	0.17
509	... ..	8.1	3	10	45	4.13	141	45	4.6	3	0.31
510	... ..	8.4	1	10	46	2.79	141	39	51.2	1	0.32
511	... ..	9.0	1	10	47	52.85	150	5	33.6	1	0.30
512	... ..	8.9	1	10	47	59.18	129	29	12.6	1	0.26
513	... ..	9.0	1	10	50	16.20	144	30	30.0	1	0.22
514	4955 Taylor	6.8	1	10	50	40.47	147	19	36.3	1	0.28
515	... ..	9.0	1	10	52	15.94	143	36	15.0	1	0.23
516	... ..	8.6	2	10	52	52.74	139	32	46.5	2	0.31
517	59 Leonis c	5.5	...	10	53	41.73	83	10	6.9	2	0.14
518	61 Leonis p'	5.5	...	10	54	53.58	91	45	12.8	1	0.07
519	50 Ursæ Majoris a	2.0	..	10	55	18.65	27	30	57.2	3	0.30
520	... ..	8.2	1	10	56	59.48	145	32	27.4	1	0.36
521	... ..	9.3	1	10	57	1.96	145	35	40.0	1	0.32
522	4576 Lacaille	7.0	2	10	57	48.85	129	34	33.1	2	0.27
523	63 Leonis x	5.0	..	10	59	0.08	81	55	46.5	11	0.25
524	... ..	9.2	1	10	58	11.95	140	59	14.9	1	0.32
525	65 Leonis p'	8.5	...	10	59	57.06	87	18	29.9	1	0.30

505.— η Argus Var. 1 — Irregularly variable from 1st to 9th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	* Proper Motion.	
491	43 Leonis ...	+ 3.1465	- 0.0068	- 0.001	+ 18.021	+ 0.104	+ 0.00	3544
492	... ..	+ 3.2245	- 0.0110	...	+ 18.030	+ 0.108	...	...
493	... ..	+ 2.3937	+ 0.0121	...	+ 18.033	+ 0.158	...	...
494	4653 Taylor ...	+ 2.0173	+ 0.0129	...	+ 18.103	+ 0.119	...	...
495	45 Leonis ...	+ 3.1759	- 0.0084	- 0.002	+ 18.193	+ 0.187	+ 0.01	3575
496	... ..	+ 2.2182	+ 0.0160	...	+ 18.247	+ 0.126	...	...
497	30 Sextantis ...	+ 3.0726	- 0.0030	- 0.004	+ 18.297	+ 0.175	+ 0.03	3597
498	... ..	+ 3.2076	- 0.0102	...	+ 18.298	+ 0.183	...	...
499	47 Leonis ρ ...	+ 3.1634	- 0.0080	0.000	+ 18.380	+ 0.176	+ 0.03	3600
500	... ..	+ 2.2498	+ 0.0181	...	+ 18.502	+ 0.119	...	...
501	... ..	+ 2.5083	+ 0.0182	...	+ 18.687	+ 0.125	...	...
502	... ..	+ 2.5486	+ 0.0177	...	+ 18.708	+ 0.126	...	...
503	36 Sextantis ...	+ 3.0982	- 0.0040	- 0.006	+ 18.789	+ 0.150	+ 0.01	3684
504	... ..	+ 2.4134	+ 0.0207	...	+ 18.809	+ 0.114	...	...
505	γ Argus Var. 1 ...	+ 2.3100	+ 0.0215	- 0.003	+ 18.839	+ 0.107	+ 0.01	3695
506	... ..	+ 2.3959	+ 0.0218	...	+ 18.888	+ 0.109	...	...
507	53 Leonis δ ...	+ 3.1608	- 0.0080	- 0.003	+ 18.908	+ 0.145	+ 0.02	3708
508	4886 Taylor ...	+ 2.3976	+ 0.0190	...	+ 18.928	+ 0.117	...	...
509	... ..	+ 2.5274	+ 0.0213	...	+ 18.993	+ 0.110	...	...
510	... ..	+ 2.5359	+ 0.0215	...	+ 19.020	+ 0.109	...	...
511	... ..	+ 2.3526	+ 0.0246	...	+ 19.071	+ 0.098	...	...
512	... ..	+ 2.7316	+ 0.0164	...	+ 19.073	+ 0.115	...	...
513	... ..	+ 2.5104	+ 0.0238	...	+ 19.134	+ 0.102	...	...
514	4955 Taylor ...	+ 2.4510	+ 0.0250	...	+ 19.145	+ 0.097	...	...
515	... ..	+ 2.5443	+ 0.0239	...	+ 19.187	+ 0.100	...	...
516	... ..	+ 2.6194	+ 0.0222	...	+ 19.201	+ 0.102	...	...
517	59 Leonis ϵ ...	+ 3.1178	- 0.0052	- 0.005	+ 19.231	+ 0.122	+ 0.06	3709
518	61 Leonis ρ^1 ...	+ 3.0306	- 0.0007	0.000	+ 19.231	+ 0.117	+ 0.04	3776
519	50 Ursæ Majoris α ...	+ 3.7869	- 0.0821	- 0.017	+ 19.261	+ 0.144	+ 0.09	3777
520	... ..	+ 2.5431	+ 0.0262	...	+ 19.302	+ 0.093	...	...
521	... ..	+ 2.5424	+ 0.0263	...	+ 19.303	+ 0.092	...	...
522	4576 Lacaille ...	+ 2.7758	+ 0.0179	...	+ 19.321	+ 0.100	...	...
523	63 Leonis χ ...	+ 3.1226	- 0.0056	- 0.024	+ 19.326	+ 0.113	+ 0.08	3788
524	... ..	+ 2.6324	+ 0.0242	...	+ 19.330	+ 0.094	...	...
525	65 Leonis ρ^2 ...	+ 3.0583	- 0.0028	- 0.028	+ 19.371	+ 0.109	+ 0.08	3798

491.—495.—497.—525.—Proper Motions adopted from "Greenwich Catalogue."

505.—Proper Motions from Mr. Stone's list, "Mem. R. A. S." Vol. 42.

518.—Proper Motions from Mr. Stone's list, "Mem. R. A. S." Vol. 33.

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
526	... ..	9.7	1	11	0	36.53	147	13	43.7	1	0.33
527	21367 Lalande ...	8.0	1	11	3	18.75	78	5	17.8	1	0.37
528	... ..	8.2	1	11	4	20.19	106	14	31.1	1	0.37
529	5092 Taylor ...	8.8	1	11	5	18.66	143	49	7.7	1	0.33
530	... ..	9.0	2	11	5	41.10	83	50	21.8	2	0.22
531	69 Leonis <i>p</i> ¹ ...	5.5	...	11	6	47.83	89	19	48.4	1	0.14
532	68 Leonis <i>δ</i> ...	2.5	...	11	6	52.28	68	43	53.2	10	0.25
533	... ..	8.2	1	11	7	7.12	145	40	14.6	1	0.33
534	... ..	8.0	1	11	8	34.11	150	50	49.2	1	0.36
535	... ..	9.8	1	11	9	28.70	145	55	13.9	1	0.34
536	74 Leonis <i>φ</i> ...	4.7	...	11	9	44.90	92	54	32.0	4	0.20
537	... ..	9.8	1	11	10	31.90	141	8	35.7	1	0.32
538	... ..	9.0	1	11	11	8.16	127	38	22.5	1	0.32
539	12 Crateris <i>δ</i> ...	3.3	...	11	12	32.57	104	2	31.6	8	0.26
540	... ..	7.9	3	11	12	48.58	129	32	6.8	3	0.35
541	4726 Lacaille ...	7.6	2	11	16	5.21	145	51	29.0	2	0.33
542	5220 Taylor ...	8.1	3	11	19	0.51	131	55	30.8	3	0.34
543	... ..	8.6	1	11	19	24.96	129	30	57.8	1	0.32
544	... ..	9.5	1	11	21	41.86	128	22	47.4	1	0.24
545	... ..	8.1	4	11	22	7.66	129	4	15.7	4	0.30
546	... ..	9.0	1	11	22	48.14	145	53	41.9	1	0.32
547	... ..	9.0	1	11	23	11.85	142	52	33.9	1	0.32
548	87 Leonis <i>ε</i> ...	5.5	...	11	23	21.88	92	15	13.9	1	0.37
549	... ..	9.1	2	11	24	35.16	146	8	57.4	2	0.34
550	... ..	9.1	2	11	26	15.02	143	51	15.2	2	0.23
551	... ..	10.2	1	11	26	39.88	23	17	32.2	1	0.32
552	... ..	8.5	1	11	29	50.97	140	15	40.3	1	0.32
553	91 Leonis <i>v</i> ...	4.7	...	11	29	59.13	90	4	24.3	13	0.27
554	... ..	9.2	1	11	32	9.19	144	14	32.4	1	0.32
555	... ..	8.8	1	11	33	57.32	127	49	16.1	1	0.33
556	... ..	8.8	1	11	34	20.24	144	20	39.4	1	0.35
557	... ..	9.0	1	11	36	3.21	139	40	16.5	1	0.33
558	5384 Taylor ...	6.0	2	11	37	2.55	151	41	7.3	2	0.35
559	... ..	8.0	1	11	38	9.35	149	28	49.4	1	0.34
560	... ..	9.8	1	11	38	42.13	129	31	5.1	1	0.32

551.—Comparison star for Comet 2, 1861.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
526	...	+ 2 5328	+ 0 0282	...	+ 19 385	+ 0 057	...	...
527	21367 Labade	+ 3 1411	- 0 0075	...	+ 19 445	+ 0 104	...	...
528	...	+ 2 5097	+ 0 0313	...	+ 19 466	+ 0 080	...	...
529	5002 Taylor	+ 2 6490	+ 0 0276	...	+ 19 487	+ 0 053	...	...
530	...	+ 3 1059	- 0 0043	...	+ 19 494	+ 0 098	...	...
531	69 Leonis p ¹ ...	+ 3 0757	- 0 0013	0 000	+ 19 517	+ 0 095	0 00	2832
532	68 Leonis s	+ 3 1916	- 0 0132	+ 0 011	+ 19 519	+ 0 098	+ 0 14	2834
533	...	+ 2 6243	+ 0 0294	...	+ 19 524	+ 0 079	...	...
534	...	+ 2 5357	+ 0 0441	...	+ 19 552	+ 0 074	...	...
535	...	+ 2 6400	+ 0 0304	...	+ 19 570	+ 0 076	...	...
536	74 Leonis d	+ 3 0573	+ 0 0006	- 0 009	+ 19 575	+ 0 059	+ 0 04	2848
537	...	+ 2 7167	+ 0 0273	...	+ 19 590	+ 0 077	...	...
538	...	+ 2 8539	+ 0 0196	...	+ 19 601	+ 0 080	...	...
539	12 Crateris s	+ 3 0032	+ 0 0064	- 0 009	+ 19 627	+ 0 081	- 0 18	2859
540	...	+ 2 8465	+ 0 0200	...	+ 19 631	+ 0 077	...	...
541	4726 Lacaille	+ 2 6966	+ 0 0324	...	+ 19 688	+ 0 067	...	...
542	5220 Taylor	+ 2 5585	+ 0 0225	...	+ 19 735	+ 0 090	...	...
543	...	+ 2 8778	+ 0 0209	...	+ 19 741	+ 0 085	...	...
544	...	+ 2 8959	+ 0 0206	...	+ 19 776	+ 0 061	...	...
545	...	+ 2 8935	+ 0 0209	...	+ 19 781	+ 0 060	...	...
546	...	+ 2 7530	+ 0 0344	...	+ 19 791	+ 0 056	...	...
547	...	+ 2 7896	+ 0 0318	...	+ 19 797	+ 0 046	...	...
548	87 Leonis e	+ 3 0937	+ 0 0011	- 0 001	+ 19 799	+ 0 062	+ 0 08	2916
549	...	+ 2 7652	+ 0 0352	...	+ 19 816	+ 0 053	...	...
550	...	+ 2 8035	+ 0 0335	...	+ 19 838	+ 0 051	...	...
551	...	+ 3 5222	- 0 0880	...	+ 19 843	+ 0 055	...	...
552	...	+ 2 7772	+ 0 0406	...	+ 19 881	+ 0 044	...	...
553	91 Leonis v	+ 3 0718	+ 0 0003	- 0 003	+ 19 884	+ 0 049	- 0 03	2946
554	...	+ 2 8471	+ 0 0356	...	+ 19 907	+ 0 041	...	...
555	...	+ 2 9544	+ 0 0219	...	+ 19 925	+ 0 040	...	...
556	...	+ 2 8638	+ 0 0364	...	+ 19 929	+ 0 037	...	...
557	...	+ 2 9078	+ 0 0320	...	+ 19 945	+ 0 035	...	...
558	5384 Taylor	+ 2 8235	+ 0 0170	...	+ 19 954	+ 0 032	...	2976
559	...	+ 2 8548	+ 0 0441	...	+ 19 964	+ 0 030	...	...
560	...	+ 2 9696	+ 0 0237	...	+ 19 969	+ 0 031	...	...

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
561	... ..	7.9	1	11	40	56.86	140	52	2.4	1	0.38
562	... ..	8.7	1	11	41	9.03	126	30	25.6	1	0.26
563	... ..	8.2	2	11	41	12.36	129	32	6.3	12	0.29
564	94 Leonis β (Deneb)	2.0	...	11	42	7.21	70	40	5.0	11	0.30
565	... ..	8.5	2	11	43	8.28	143	45	15.7	12	0.35
566	5 Virginia β ...	3.5	...	11	43	36.67	87	28	8.6	4	0.22
567	5427 Taylor ...	6.0	1	11	44	5.15	94	34	38.6	1	0.38
568	... ..	8.7	1	11	44	41.16	129	2	40.7	1	0.33
569	5433 Taylor ...	7.7	1	11	44	51.57	129	33	3.0	1	0.32
570	... ..	9.3	1	11	45	51.40	142	31	0.6	1	0.34
571	64 Ursæ Majoris γ ...	2.3	...	11	46	39.67	35	32	56.9	1	0.30
572	... ..	8.7	2	11	46	56.96	128	5	29.6	2	0.28
573	... ..	8.4	1	11	51	23.65	128	52	34.2	1	0.26
574	... ..	9.3	1	11	51	36.57	144	12	54.1	1	0.32
575	... ..	8.0	...	11	52	20.94	154	32	32.2	1	0.36
576	... ..	9.7	2	11	53	50.17	129	35	50.1	2	0.35
577	... ..	9.0	3	11	56	23.61	128	29	55.8	3	0.28
578	5534 Taylor ...	8.0	1	11	56	49.55	143	57	19.9	1	0.33
579	4995 Lacaille ...	7.8	1	11	56	54.06	142	44	26.8	1	0.32
580	5535 Taylor ...	7.9	2	11	57	3.47	70	25	29.7	2	0.29
581	89 R. P. L. ...	6.3	...	11	57	51.22	3	39	33.6	3	0.49
582	... ..	8.2	2	11	59	1.22	123	27	45.4	2	0.24
583	... ..	8.5	2	11	59	44.33	144	16	11.2	2	0.35
584	... ..	9.0	1	12	1	37.16	130	1	34.8	1	0.34
585	5041 Lacaille ..	7.9	1	12	2	32.58	141	23	14.3	1	0.29
586	... ..	9.0	1	12	2	37.25	141	5	30.5	1	0.34
587	10 Virginia ...	6.0	...	12	2	43.10	87	20	18.4	1	0.30
588	2 Corvi ...	3.0	...	12	3	8.08	111	51	47.5	8	0.33
589	... ..	9.9	1	12	6	3.08	130	11	7.8	1	0.34
590	... ..	8.2	1	12	6	12.47	138	27	32.0	1	0.27
591	5613 Taylor ...	8.0	1	12	7	55.44	130	22	49.0	1	0.33
592	69 Ursæ Majoris δ ...	3.5	...	12	8	40.88	32	12	42.4	2	0.37
593	... ..	8.8	1	12	9	50.14	144	20	13.0	1	0.33
594	13 Virginia ...	6.3	...	12	11	42.07	90	1	51.3	2	0.22
595	5645 Taylor ...	6.9	3	12	12	31.20	152	5	57.5	3	0.34

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
561	... ..	+ 2 8808	+ 0 0458	...	+ 19 086	+ 0 036	...	...
562	... ..	+ 2 9008	+ 0 0218	...	+ 19 087	+ 0 027	...	...
563	... ..	+ 2 9617	+ 0 0240	...	+ 19 088	+ 0 027	...	...
564	94 Leonis β (Deneb).	+ 3 1006	- 0 0074	- 0 036	+ 19 094	+ 0 023	+ 0 10	3096
565	... ..	+ 2 9379	+ 0 0382	...	+ 20 001	+ 0 022	...	...
566	5 Virginis δ ...	+ 3 0763	- 0 0003	+ 0 048	+ 20 004	+ 0 023	+ 0 28	4002
567	5427 Taylor ...	+ 3 0647	+ 0 0031	...	+ 20 007	+ 0 022	...	4003
568	... ..	+ 3 0000	+ 0 0241	...	+ 20 011	+ 0 020	...	...
569	5433 Taylor ...	+ 2 9992	+ 0 0246	...	+ 20 012	+ 0 020	...	...
570	... ..	+ 2 9646	+ 0 0373	...	+ 20 017	+ 0 017	...	...
571	64 Ursæ Majoris γ ...	+ 3 1808	- 0 0433	+ 0 011	+ 20 022	+ 0 017	0 00	4017
572	... ..	+ 3 0261	+ 0 0241	...	+ 20 036	+ 0 010	...	...
573	... ..	+ 3 0317	+ 0 0249	...	+ 20 041	+ 0 007	...	...
574	... ..	+ 3 0042	+ 0 0410	...	+ 20 042	+ 0 007	...	...
575	... ..	+ 2 9783	+ 0 0604	...	+ 20 044	+ 0 006	...	...
576	... ..	+ 3 0423	+ 0 0258	...	+ 20 048	+ 0 003	...	...
577	... ..	+ 3 0553	+ 0 0253	...	+ 20 053	- 0 002	...	...
578	5534 Taylor ...	+ 3 0467	+ 0 0421	...	+ 20 053	- 0 003	...	...
579	4995 Lacaille	+ 3 0153	+ 0 0404	...	+ 20 053	- 0 003	...	...
580	5535 Taylor ...	+ 3 0782	- 0 0080	...	+ 20 054	- 0 003	...	...
581	89 R. P. L. ...	+ 3 2674	- 0 5247	...	+ 20 054	- 0 006	...	4070
582	... ..	+ 3 0675	+ 0 0253	...	+ 20 055	- 0 007	...	...
583	... ..	+ 3 0609	+ 0 0434	...	+ 20 055	- 0 009	...	...
584	... ..	+ 3 0800	+ 0 0273	...	+ 20 054	- 0 012	...	...
585	5011 Lacaille	+ 3 0207	+ 0 0400	...	+ 20 054	- 0 014	...	...
586	... ..	+ 3 0910	+ 0 0390	...	+ 20 054	- 0 015	...	...
587	10 Virginis ...	+ 3 0714	+ 0 0007	- 0 001	+ 20 054	- 0 013	+ 0 21	4094
588	2 Corvi ...	+ 3 0793	+ 0 0142	- 0 006	+ 20 054	- 0 016	- 0 01	4097
589	... ..	+ 3 1019	+ 0 0280	...	+ 20 048	- 0 021	...	...
590	... ..	+ 3 1129	+ 0 0389	...	+ 20 048	- 0 022	...	...
591	5613 Taylor ...	+ 3 1114	+ 0 0284	...	+ 20 043	- 0 023	...	...
592	69 Ursæ Majoris δ ...	+ 2 9917	- 0 0425	+ 0 015	+ 20 040	- 0 026	+ 0 04	4123
593	... ..	+ 3 1439	+ 0 0450	...	+ 20 040	- 0 027	...	...
594	13 Virginis ...	+ 3 0721	+ 0 0026	0 000	+ 20 029	- 0 032	+ 0 04	4137
595	5648 Taylor ...	+ 3 2100	+ 0 0640	...	+ 20 024	- 0 035	...	...

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
596	15 Virginis η	3.7	...	12	12	56.91	89	54	38.9	6	0.32
597	... ..	9.5	1	12	14	3.66	143	44	49.8	1	0.34
598	5119 Lacaille	8.4	1	12	15	21.68	139	34	15.4	1	0.27
599	... ..	8.0	1	12	16	46.01	147	9	46.4	1	0.37
600	... ..	8.7	2	12	17	24.22	24	43	7.3	2	0.24
601	... ..	9.8	1	12	18	39.10	143	30	8.0	1	0.34
602	... ..	9.5	...	12	19	0.47	129	43	47.8	1	0.32
603	α Crucis (1st)	2.3	...	12	19	3.52	152	20	42.4	2	0.34
604	... ..	8.0	2	12	21	6.84	145	42	19.0	2	0.37
605	... ..	8.3	2	12	24	38.58	150	58	38.9	2	0.32
606	... ..	7.5	1	12	25	56.04	28	2	1.0	1	0.33
607	21 Virginis γ	6.0	2	12	26	45.81	98	42	5.4	5	0.27
608	... ..	8.0	1	12	27	4.41	38	0	26.8	1	0.37
609	θ Corvi β	2.3	...	12	27	14.86	112	38	38.9	4	0.34
610	... ..	9.2	1	12	27	40.34	140	55	32.3	1	0.34
611	T Ursæ Majoris Var. 3 ...	8.3	3	12	30	11.19	29	45	49.5	3	0.32
612	... ..	9.2	1	12	30	50.84	142	19	41.5	1	0.39
613	R Virginis Var. 2	7.3	4	12	31	35.85	82	15	47.4	4	0.36
614	... ..	9.8	2	12	32	8.58	29	14	20.1	2	0.33
615	26 Virginis χ	6.0	1	12	32	13.76	97	14	48.0	4	0.28
616	... ..	7.0	1	12	32	51.66	28	13	23.1	1	0.32
617	5830 Taylor	7.5	1	12	34	26.89	144	0	51.4	1	0.36
618	XII 592 W. B. E....	8.0	3	12	36	1.20	93	17	48.6	3	0.29
619	S Ursæ Majoris Var. 2 ...	9.7	2	12	37	53.32	28	9	42.2	2	0.32
620	... ..	9.6	3	12	39	36.25	94	1	53.6	3	0.26
621	... ..	7.9	1	12	40	49.04	141	52	54.0	1	0.37
622	... ..	8.0	1	12	41	40.06	141	49	33.0	1	0.35
623	... ..	9.2	1	12	42	3.94	147	16	27.3	1	0.38
624	... ..	8.7	1	12	42	47.38	142	51	50.9	1	0.36
625	... ..	9.3	1	12	42	51.08	139	25	15.5	1	0.40
626	... ..	8.3	1	12	43	17.33	129	7	50.7	1	0.36
627	... ..	8.9	4	12	43	26.08	83	19	14.6	4	0.36
628	U Virginis Var. 3	9.3	3	12	44	11.78	83	42	20.5	3	0.34
629	2922 Radcliffe	6.2	1	12	45	6.74	26	16	27.1	1	0.38
630	... ..	9.7	3	12	45	19.12	83	19	6.0	3	0.35

600. 629. Comparison stars for Comet 2-1861.

611. T Ursæ Majoris Var. 3.—Period 235 days.—Range, 7th to 12th magnitude.

613.—R Virginis Var. 2.—Period 146 days.—Range, 6th to 11th magnitude.

618.—620.—Comparison stars for Hevia in 1861.

619.—S Ursæ Majoris Var. 2.—Period 225 days.—Range, 7th to 12th magnitude.

625.—U Virginis Var. 3.—Period 207 days.—Range, 8th to 13 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance			Number in R.A.C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"		
593	15 Virginia η ..	+ 3.0719	+ 0.0027	- 0.007	+ 20.023	- 0.005	+ 0.00	4145
597	... ..	+ 3.1838	+ 0.0164	...	+ 20.018	- 0.008	...	..
598	5119 Lacaille ..	+ 3.1735	+ 0.0388	...	+ 20.010	- 0.040	...	..
599	... ..	+ 3.2234	+ 0.0535	..	+ 20.001	- 0.044	...	..
600	... ..	+ 2.8517	- 0.0523	...	+ 19.997	- 0.041	...	..
601	... ..	+ 3.2190	+ 0.0461	..	+ 19.989	- 0.017	...	..
602	... ..	+ 3.1611	+ 0.0292	..	+ 19.986	- 0.017	...	..
603	α Crucis (1st) ..	+ 3.2837	+ 0.0380	- 0.006	+ 19.986	- 0.050	+ 0.01	4187
604	... ..	+ 3.2524	+ 0.0519	...	+ 19.970	- 0.053	...	..
605	... ..	+ 3.3307	+ 0.0658	...	+ 19.940	- 0.061	..	..
606	... ..	+ 2.7885	- 0.0420	...	+ 19.927	- 0.055	..	..
607	21 Virginia η ..	+ 3.0960	+ 0.0080	- 0.000	+ 19.918	- 0.062	0.00	4220
608	... ..	+ 2.8705	- 0.0294	...	+ 19.916	- 0.058	...	..
609	9 Corvi β ..	+ 3.1351	+ 0.0164	- 0.003	+ 19.914	- 0.064	+ 0.07	4234
610	... ..	+ 3.2715	+ 0.0447	...	+ 19.907	- 0.067	...	..
611	T Ursæ Majoris Var. 3	+ 2.7650	+ 0.0377	...	+ 19.881	- 0.062	...	..
612	... ..	+ 3.3043	+ 0.0476	...	+ 19.873	- 0.074	...	..
613	R Virginia Var. 2 ..	+ 3.0471	- 0.0003	...	+ 19.865	- 0.070	...	..
614	... ..	+ 2.7382	- 0.0376	...	+ 19.858	- 0.065	..	..
615	26 Virginia χ ..	+ 3.0959	+ 0.0075	- 0.006	+ 19.857	- 0.072	+ 0.04	4257
616	... ..	+ 2.7161	- 0.0384	...	+ 19.850	- 0.063	...	..
617	5830 Taylor ..	+ 3.3478	+ 0.0519	...	+ 19.829	- 0.082	..	4266
618	XII 592 W. B. E. ..	+ 3.0841	+ 0.0050	..	+ 19.808	- 0.080	...	..
619	S Ursæ Majoris Var. 2	+ 2.6602	- 0.0360	...	+ 19.781	- 0.073	..	..
620	... ..	+ 3.0883	+ 0.0002	...	+ 19.756	- 0.086	..	..
621	... ..	+ 3.3740	+ 0.0490	..	+ 19.738	- 0.095	..	..
622	... ..	+ 3.3705	+ 0.0490	..	+ 19.725	- 0.097	...	..
623	... ..	+ 3.4517	+ 0.0611	..	+ 19.715	- 0.100	...	..
624	... ..	+ 3.3598	+ 0.0612	...	+ 19.706	- 0.100	..	..
625	... ..	+ 3.3622	+ 0.0449	...	+ 19.705	- 0.099	..	..
626	... ..	+ 3.2763	+ 0.0313	..	+ 19.699	- 0.098	..	..
627	... ..	+ 3.0426	+ 0.0009	..	+ 19.691	- 0.090	..	..
628	U Virginia Var. 3 ..	+ 3.0438	+ 0.0012	...	+ 19.683	- 0.093	..	..
629	2922 Radcliffe ..	+ 2.5424	- 0.0341	..	+ 19.668	- 0.080	..	..
630	... ..	+ 3.0414	+ 0.0010	..	+ 19.667	- 0.095	..	..

603.—Proper Motions adopted from "Stone's Catalogue."

615.—Proper Motions from Mr Stone's list "Mem. R. A. S." Vol. 23.

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
631	40 Virginia ψ	5.3	...	12	47	16.98	96	47	55.3	2	0.30
632	99 R. P. L.	6.0	...	12	48	0.01	5	50	52.8	1	0.38
633	... ..	7.8	1	12	49	23.85	145	34	11.3	1	0.37
634	12 Caudæ Venaticorum ...	3.0	...	12	49	39.61	50	56	48.11	11	0.36
635	5974 Taylor	8.7	1	12	51	54.65	143	38	34.3	1	0.41
636	... ..	8.8	1	12	53	16.40	143	40	22.3	1	0.38
637	... ..	9.2	1	12	54	37.80	139	18	22.8	1	0.29
638	... ..	10.3	2	12	56	11.01	113	12	31.9	2	0.31
639	5381 Lacaille	8.8	1	12	57	7.84	129	57	6.1	1	0.40
640	... ..	9.1	2	12	58	6.22	124	28	41.6	2	0.37
641	50 Virginis	6.0	2	13	2	38.28	99	36	11.3	3	0.33
642	51 Virginis θ	4.8	...	13	2	54.57	97	48	44.1	11	0.36
643	... ..	9.0	1	13	4	32.13	138	10	32.3	1	0.41
644	W Virginis Var. 1	8.4	3	13	6	54.18	105	49	54.7	4	0.29
645	... ..	8.1	2	13	9	45.47	129	56	15.7	2	0.37
646	55 Virginis	6.7	...	13	10	19.73	99	49	42.7	1	0.23
647	101 R. P. L.	7.6	...	13	10	26.11	1	37	17.6	3	0.49
648	6129 Taylor	7.4	2	13	12	12.95	130	28	30.4	2	0.35
649	... ..	7.8	1	13	12	53.10	122	56	34.2	1	0.33
650	5503 Lacaille	7.8	1	13	14	8.92	125	23	51.4	2	0.35
651	13563 O. A. N.	8.6	1	13	15	24.40	27	53	14.0	1	0.41
652	... ..	8.8	1	13	15	47.75	145	12	51.0	1	0.39
653	67 Virginis α (Spica) ...	1.0	...	13	18	1.85	100	27	1.9	14	0.35
654	V Virginis Var. 7	9.3	1	13	20	46.90	92	27	59.2	1	0.29
655	R Hydrae Var. 1	6.6	1	13	22	17.30	112	34	38.9	1	0.37
656	... ..	10.8	1	13	23	18.12	88	38	7.3	1	0.82
657	6257 Taylor	8.5	1	13	25	26.07	148	48	21.6	1	0.42
658	76 Virginis λ	6.3	...	13	25	48.49	99	27	47.4	3	0.35
659	S Virginis Var. 6	7.0	2	13	25	53.96	96	29	41.9	2	0.34
660	... ..	8.8	1	13	26	37.79	131	35	11.9	1	0.42
661	79 Virginis ζ	4.0	...	13	27	45.87	89	53	28.7	15	0.36
662	... ..	9.3	2	13	36	31.31	144	38	18.5	2	0.41
663	6303 Taylor	8.8	1	13	36	34.28	147	33	27.4	1	0.40
664	... ..	9.6	2	13	37	30.37	123	48	3.4	2	0.37
665	... ..	7.7	1	13	37	31.19	128	40	16.9	1	0.38

632.—1940 Groombridge.

644.—W Virginis Var. 1.—Irregularly variable from 7th to 10th magnitude.

647.—2006 Groombridge.

651.—Comparison star for Comet 2, 1861.

654.—V Virginis Var. 7.—Period 261 days.—Range, 7th to below 13th magnitude.

655.—R Hydrae Var. 1.—Period about 15 months.—Range, 4th to 10th magnitude.

656.—Observed by mistake for Europa.

659.—S Virginis Var. 6.—Period 374 days.—Range, 6th to 12th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
631	40 Virginia ϕ ...	+ 3.1145	+ 0.0092	- 0.002	+ 19.630	- 0.101	+ 0.01	4330
632	99 R. P. I. ...	+ 0.3486	+ 0.2263	- 0.017	+ 19.613	- 0.019	- 0.04	4343
633	... ..	+ 3.4892	+ 0.0586	...	+ 19.591	- 0.117	...	...
634	12 Can. Venaticorum.	+ 2.8388	- 0.0132	- 0.023	+ 19.587	- 0.098	- 0.03	4346
635	5974 Taylor ...	+ 3.4799	+ 0.0516	...	+ 19.542	- 0.122	...	...
636	... ..	+ 3.4010	+ 0.0549	...	+ 19.515	- 0.124	...	...
637	... ..	+ 3.4392	+ 0.0405	...	+ 19.488	- 0.127	...	...
638	... ..	+ 3.2112	+ 0.0194	...	+ 19.455	- 0.122	...	...
639	5381 Lacaille ...	+ 3.3184	+ 0.0335	...	+ 19.436	- 0.128	...	...
640	... ..	+ 3.3023	+ 0.0278	...	+ 19.413	- 0.129	...	...
641	50 Virginia ...	+ 3.1331	+ 0.0104	- 0.001	+ 19.310	- 0.131	+ 0.02	4397
642	51 Virginia θ ...	+ 3.1025	+ 0.0079	- 0.004	+ 19.305	- 0.132	+ 0.04	4401
643	... ..	+ 3.4873	+ 0.0459	...	+ 19.265	- 0.150	...	...
644	W Virginia Var. 1. ...	+ 3.1812	+ 0.0142	...	+ 19.206	- 0.142	...	...
645	... ..	+ 3.4075	+ 0.0316	...	+ 19.133	- 0.157	...	...
646	58 Virginia ...	+ 3.1421	+ 0.0108	- 0.007	+ 19.118	- 0.147	- 0.01	4442
647	101 R. P. I. ...	- 11.2142	+ 8.3584	...	+ 19.115	+ 0.457	...	...
648	6129 Taylor ...	+ 3.4257	+ 0.0853	...	+ 19.067	- 0.163	...	...
649	... ..	+ 3.3430	+ 0.0273	...	+ 19.049	- 0.161	...	...
650	5503 Lacaille ...	+ 3.3742	+ 0.0298	...	+ 19.014	- 0.164	...	...
651	13563 O. A. N. ...	+ 2.2557	- 0.0189	...	+ 18.980	- 0.114	...	...
652	... ..	+ 3.0971	+ 0.0629	...	+ 18.968	- 0.183	...	...
653	67 Virginia α (Spica) ...	+ 3.1543	+ 0.0116	- 0.005	+ 18.901	- 0.163	+ 0.04	4480
654	V Virginia Var. 7 ...	+ 3.0919	+ 0.0073	...	+ 18.823	- 0.161	...	...
655	R Hydra Var. 1 ...	+ 3.2674	+ 0.0192	+ 0.002	+ 18.777	- 0.176	- 0.01	4501
656	... ..	+ 3.0607	+ 0.0053	...	+ 18.746	- 0.267	...	...
657	6257 Taylor ...	+ 3.8778	+ 0.0761	...	+ 18.673	- 0.215	...	...
658	76 Virginia λ ...	+ 3.1536	+ 0.0113	- 0.004	+ 18.666	- 0.176	+ 0.03	4521
659	S Virginia Var. 6 ...	+ 3.1278	+ 0.0096	...	+ 18.663	- 0.175	...	...
660	... ..	+ 3.5099	+ 0.0379	...	+ 18.630	- 0.197	...	...
661	79 Virginia ζ ...	+ 3.0711	+ 0.0064	- 0.019	+ 18.603	- 0.176	- 0.06	4532
662	... ..	+ 3.8424	+ 0.0612	...	+ 18.302	- 0.237	...	...
663	6363 Taylor ...	+ 3.3929	+ 0.0733	...	+ 18.298	- 0.243	...	...
664	... ..	+ 3.4415	+ 0.0292	...	+ 18.267	- 0.215	...	...
665	... ..	+ 3.5138	+ 0.0346	...	+ 18.267	- 0.220	...	...

641.—646. 658.—Proper Motions from Mr. Stone's list "Mem. R. A. S." Vol. 33.

655.—Proper Motions adopted from "Greenwood's Catalogue"

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
666	... ..	8.6	2	13	38	13.86	122	47	1.2	2	0.36
667	... ..	8.2	2	13	38	33.97	152	45	59.9	2	0.38
668	... ..	9.2	1	13	40	30.30	129	24	0.6	1	0.34
669	85 Ursæ Majoris η	2.3	..	13	42	10.62	40	0	25.4	3	0.36
670	... ..	8.4	2	13	43	14.39	123	6	31.0	2	0.36
671	... ..	8.2	1	13	43	24.14	123	13	4.9	1	0.36
672	... ..	9.0	...	13	44	15.25	127	56	40.9	1	0.41
673	... ..	9.0	1	13	45	23.48	128	23	4.5	1	0.41
674	... ..	8.5	1	13	45	42.40	122	54	31.3	2	0.38
675	8 Bootis η	3.0	...	13	48	12.51	70	55	10.5	13	0.37
676	... ..	8.3	2	13	50	11.62	123	43	44.0	2	0.32
677	... ..	8.0	1	13	50	40.64	123	43	55.5	1	0.30
678	... ..	8.4	1	13	53	7.78	135	40	51.4	1	0.36
679	98 Virginis τ	4.5	...	13	54	43.58	87	47	45.3	13	0.38
680	5794 Lacaille	6.3	1	13	57	4.80	152	47	34.6	1	0.39
681	6585 Taylor	7.7	1	14	1	22.44	124	14	3.6	1	0.34
682	... ..	9.0	2	14	2	25.96	129	4	15.2	2	0.41
683	U Bootis Var. 4	0.5	3	14	4	21.64	79	32	32.2	3	0.38
684	6616 Taylor	5.7	1	14	5	30.32	146	26	48.4	1	0.37
685	98 Virginis α	4.3	...	14	5	38.62	99	35	20.2	2	0.38
686	... ..	8.2	1	14	6	8.79	135	1	18.1	1	0.36
687	16 Bootis α (<i>Arcturus</i>)	1.0	...	14	9	27.55	70	6	30.0	6	0.42
688	100 Virginis λ	5.0	...	14	11	45.19	102	44	35.8	5	0.38
689	... ..	9.6	1	14	12	30.81	136	49	53.7	1	0.34
690	... ..	8.9	2	14	14	34.38	122	35	44.6	2	0.44
691	... ..	8.7	1	14	15	19.50	122	11	35.6	1	0.37
692	6709 Taylor	7.0	1	14	15	58.65	119	3	19.6	1	0.42
693	2 Libræ	6.7	...	14	16	6.76	101	5	28.8	1	0.31
694	5926 Lacaille	8.3	3	14	16	40.24	118	59	58.2	3	0.42
695	6721 Taylor	7.0	...	14	17	22.38	101	3	1.7	1	0.30
696	... ..	10.0	1	14	17	24.96	123	13	23.0	1	0.42
697	6740 Taylor	7.5	3	14	19	5.08	133	42	54.0	3	0.43
698	... ..	9.3	1	14	21	57.61	122	33	58.6	1	0.41
699	5962 Lacaille	7.5	1	14	22	42.28	129	46	44.0	1	0.32
700	... ..	8.0	...	14	23	42.53	136	54	22.6	1	0.46

683.—U. Bootis Var. 4.—Period uncertain.—Range, 8.7 to 13.3 magnitude.

Observed with the Madras Meridian Circle in that Year.

No.	Star.	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		"	"	"	"	"	"	
666	..	+ 3 4290	+ 0 0283	..	+ 18 240	- 0 216	..	..
667	.. ..	+ 4 1552	+ 0 0964	..	+ 18 220	- 0 261	..	..
668	.. ..	+ 3 5381	+ 0 0350	..	+ 18 158	- 0 226	..	..
669	55 Ursa Majoris γ	+ 2 3850	- 0 0103	- 0 012	+ 18 065	- 0 159	+ 0 03	4607
670	.. ..	+ 3 4517	+ 0 0287	..	+ 18 065	- 0 227	..	..
671	.. ..	+ 3 4538	+ 0 0288	..	+ 18 048	- 0 225	..	..
672	.. ..	+ 3 5301	+ 0 0341	..	+ 18 016	- 0 235	..	..
673	.. ..	+ 3 5421	+ 0 0346	..	+ 17 972	- 0 238	..	..
674	.. ..	+ 3 4571	+ 0 0286	..	+ 17 900	- 0 233	..	..
675	8 Bootis γ	+ 2 8617	- 0 0006	- 0 004	+ 17 861	- 0 159	+ 0 36	4613
676	.. ..	+ 3 4819	+ 0 0295	..	+ 17 781	- 0 243	..	..
677	.. ..	+ 3 4856	+ 0 0296	..	+ 17 762	- 0 244	..	..
678	.. ..	+ 3 7208	+ 0 0453	..	+ 17 661	- 0 265	..	..
679	93 Virginia τ	+ 3 6475	+ 0 0064	+ 0 001	+ 17 594	- 0 211	+ 0 07	4672
680	5704 Lacaille	+ 4 3436	+ 0 0906	..	+ 17 494	- 0 318	..	..
681	6585 Taylor ..	+ 3 5317	+ 0 0302	..	+ 17 307	- 0 208	..	..
682	.. ..	+ 3 6249	+ 0 0357	..	+ 17 260	- 0 276	..	..
683	U Bootis Var. 4	+ 2 9447	+ 0 0035	..	+ 17 174	- 0 229	..	..
684	6616 Taylor ..	+ 4 1217	+ 0 0686	..	+ 17 122	- 0 320	..	4709
685	98 Virginia α	+ 3 1905	+ 0 0122	+ 0 001	+ 17 117	- 0 250	- 0 02	4716
686	.. ..	+ 3 7719	+ 0 0445	..	+ 17 053	- 0 295	..	..
687	16 Bootis (<i>Arcturus</i>)	+ 2 8132	+ 0 0004	- 0 079	+ 16 941	- 0 237	+ 1 93	4729
688	100 Virginia λ	+ 3 2365	+ 0 0140	- 0 002	+ 16 832	- 0 264	- 0 02	4743
689	.. ..	+ 3 8509	+ 0 0477	..	+ 16 795	- 0 314	..	..
690	.. ..	+ 3 5458	+ 0 0284	..	+ 16 696	- 0 298	..	..
691	.. ..	+ 3 5408	+ 0 0281	..	+ 16 659	- 0 294	..	..
692	6709 Taylor ..	+ 3 4875	+ 0 0252	..	+ 16 627	- 0 292	..	..
693	2 Liliæ ..	+ 3 2188	+ 0 0132	- 0 004	+ 16 621	- 0 270	+ 0 09	4766
694	5926 Lacaille	+ 3 4882	+ 0 0253	..	+ 16 591	- 0 293	..	..
695	6721 Taylor ..	+ 3 2191	+ 0 0132	..	+ 16 559	- 0 272	..	4772
696	.. ..	+ 3 5602	+ 0 0292	..	+ 16 557	- 0 301	..	..
697	6740 Taylor ..	+ 3 8011	+ 0 0423	..	+ 16 474	- 0 323	..	..
698	.. ..	+ 3 5678	+ 0 0285	..	+ 16 329	- 0 309	..	..
699	5962 Lacaille	+ 3 7213	+ 0 0305	..	+ 16 291	- 0 324	..	..
700	.. ..	+ 3 9103	+ 0 0476	..	+ 16 240	- 0 342	..	..

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations	Mean Right Ascension.			Mean Polar Distance.			Observations	Fraction of Year
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
701	... ..	8.4	2	14	24	12.75	123	48	35.5	2	0.41
702	14634 O. A. N. ...	7.0	1	14	25	51.40	20	8	24.1	1	0.46
703	25 Bootis <i>p</i> ...	4.0	...	14	25	58.06	59	1	49.2	8	0.41
704	14652 O. A. N. ...	8.5	1	14	27	1.13	20	6	57.6	1	0.46
705	R Camelopardi Var. 1 ...	10.8	1	14	28	9.31	5	33	16.5	1	0.34
706	... ..	8.0	1	14	29	26.79	124	55	30.2	1	0.39
707	α Centauri (2nd) ...	1.0	...	14	30	23.07	150	16	21.0	2	0.44
708	... ..	8.3	1	14	32	42.12	121	44	17.9	1	0.39
709	α Lupi ...	5.8	1	14	32	54.02	136	48	6.9	1	0.42
710	36 Bootis ϵ (Mirac) ...	2.3	...	14	39	2.94	62	21	3.7	11	0.44
711	... ..	7.7	2	14	39	20.40	124	9	35.1	2	0.40
712	... ..	8.8	2	14	42	24.84	129	6	50.7	2	0.36
713	θ Libræ α^3 ...	2.3	..	14	43	21.52	105	28	28.0	12	0.43
714	β Ursæ Minoris Var. 1 ...	2.0	...	14	51	8.11	15	17	19.1	1	0.41
715	... ..	9.1	1	14	51	23.24	39	19	38.3	1	0.39
716	... ..	9.0	1	14	51	35.46	123	12	43.3	1	0.49
717	6991 Taylor ...	6.4	1	14	51	52.37	39	48	40.7	1	0.59
718	15004 O. A. N. ...	7.5	1	14	53	62.88	39	21	3.3	1	0.39
719	15023 O. A. N. ...	7.5	1	14	55	39.47	27	47	28.9	1	0.46
720	43 Bootis ψ ...	5.0	...	14	58	37.08	62	31	14.3	8	0.44
721	7079 Taylor ...	6.7	1	15	3	19.98	123	7	14.8	1	0.49
722	15138 O. A. N. ...	9.2	1	15	4	7.39	43	0	6.3	1	0.40
723	24 Libræ ϵ^1 ...	5.3	...	15	4	28.26	109	16	29.1	2	0.38
724	111 R. P. L. ...	6.9	...	15	5	45.19	5	31	23.7	1	0.39
725	27 Libræ β ...	2.0	...	15	9	41.44	98	51	43.6	7	0.45
726	... ..	9.5	1	15	14	12.39	123	7	30.8	1	0.40
727	... ..	8.7	3	15	20	23.57	130	8	34.7	3	0.48
728	32 Libræ ζ^1 ...	4.0	...	15	20	35.48	106	14	22.2	1	0.46
729	... ..	7.5	1	15	21	40.06	129	25	58.8	1	0.40
730	XV 395 W. B. E. ...	8.9	2	15	21	58.56	101	15	30.5	2	0.54
731	114 R. P. L. ...	6.9	...	15	22	29.01	2	14	59.0	1	0.97
732	XV 429 W. B. E. ...	9.4	2	15	24	2.57	101	28	30.0	2	0.56
733	7240 Taylor ...	7.5	1	15	24	24.18	130	1	28.8	1	0.36
734	3394 Radcliffe ...	8.0	1	15	25	3.61	41	49	6.2	1	0.46
735	38 Libræ γ ...	4.3	..	15	27	55.27	104	20	0.1	4	0.28

702.—704.—719.—734.—Comparison stars for Comet 2, 1862.

706.—R Camelopardi Var. 1.—Period 266 days.—Range, 8th to 12th magnitude.

714.— β Ursæ Minoris Var. 1.—(Kitch)—Supposed to vary irregularly from 2nd to 2.6 magnitude.

715.—717.—718.—722.—Comparison stars for Comet 2, 1861.

724.—2213 (Groombridge).

730.—732.—Comparison stars for Sappho in 1861.

731.—2283 (Groombridge).

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension			In Polar Distance.			Number is R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation	Proper Motion	
		"	"	"	"	"	"	
701	... ..	+ 3 5990	+ 0 0297	..	+ 16 214	- 0 316	..	..
702	14634 O. A. N.	+ 0 9053	+ 0 0359	..	+ 16 199	- 0 065	..	..
703	25 Bootis ρ ...	+ 2 5048	- 0 0015	- 0 008	+ 16 124	- 0 233	- 0 14	4508
704	14652 O. A. N.	+ 0 8876	+ 0 0366	..	+ 16 068	- 0 094	..	..
705	R Camelopardi Var. 1.	- 5 2092	+ 1 0886	..	+ 16 008	- 0 451	..	..
706	... ..	+ 2 6386	+ 0 0306	..	+ 15 941	- 0 329	..	..
707	a Centauri (2nd)	+ 4 4996	+ 0 0878	- 0 476	+ 15 894	- 0 410	- 0 81	4533
708	... ..	+ 3 5833	+ 0 0274	..	+ 15 766	- 0 330	..	..
709	a Lupi ...	+ 3 9531	+ 0 0472	..	+ 15 755	- 0 361	..	4539
710	36 Bootis ϵ (Mirac) ..	+ 2 6240	- 0 0001	- 0 005	+ 15 417	- 0 252	- 0 01	4576
711	... ..	+ 3 6532	+ 0 0294	..	+ 15 400	- 0 349	..	..
712	... ..	+ 3 7796	+ 0 0350	..	+ 15 227	- 0 366	..	..
713	9 Libræ α^2	+ 3 3140	+ 0 0154	- 0 007	+ 15 173	- 0 321	+ 0 06	4595
714	B Ursa Minoris Var. 1	- 0 2500	+ 0 1022	- 0 005	+ 14 719	+ 0 018	+ 0 03	4606
715	... ..	+ 1 0623	+ 0 0014	..	+ 14 704	- 0 201	..	..
716	... ..	+ 3 6679	+ 0 0280	..	+ 14 692	- 0 370	..	..
717	6291 Taylor ...	+ 1 9780	+ 0 0013	..	+ 14 675	- 0 203	..	4607
718	15004 O. A. N.	+ 1 9503	+ 0 0017	..	+ 14 554	- 0 202	..	..
719	15023 O. A. N.	+ 1 3126	+ 0 0151	..	+ 14 447	- 0 159	..	..
720	43 Bootis ϕ	+ 2 5843	+ 0 0010	- 0 013	+ 14 262	- 0 231	0 00	4609
721	7079 Taylor ...	+ 3 6978	+ 0 0273	..	+ 13 974	- 0 303	..	..
722	16138 O. A. N.	+ 2 0403	+ 0 0015	..	+ 13 924	- 0 220	..	..
723	24 Libræ ϵ^1	+ 3 4090	+ 0 0171	- 0 002	+ 13 902	- 0 364	+ 0 04	4606
724	111 R. P. L.	- 6 9459	+ 1 1880	..	+ 13 821	+ 0 728	..	5022
725	27 Libræ δ	+ 3 2258	+ 0 0117	- 0 009	+ 13 509	- 0 353	+ 0 01	5084
726	... ..	+ 3 7260	+ 0 0264	..	+ 13 375	- 0 414	..	..
727	... ..	+ 3 0870	+ 0 0332	..	+ 12 863	- 0 447	..	..
728	32 Libræ ζ^1	+ 3 3711	+ 0 0146	+ 0 002	+ 12 852	- 0 284	+ 0 05	5089
729	... ..	+ 3 9195	+ 0 0322	..	+ 12 779	- 0 445	..	..
730	XV 395 W. B. E.	+ 3 2775	+ 0 0124	..	+ 12 758	- 0 374	..	..
731	114 R. P. L.	- 23 2282	+ 7 7947	..	+ 12 734	+ 2 614	..	5140
732	XV 429 W. B. E.	+ 3 2831	+ 0 0125	..	+ 12 619	- 0 377	..	..
733	7240 Taylor ...	+ 3 9490	+ 0 0325	..	+ 12 504	- 0 453	..	..
734	3396 Radcliffe ...	+ 1 9064	+ 0 0037	..	+ 12 519	- 0 222	..	..
735	28 Libræ γ	+ 3 3413	+ 0 0136	+ 0 002	+ 12 352	- 0 289	- 0 02	5124

707.—Proper Motions adopted from "Stone's Catalogue."

728.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
736	5 Cor. Bor a (<i>Alpha</i>) ...	2.0	...	15	28	55.81	62	49	33.6	5	0.49
737	... ..	9.8	1	15	29	12.53	119	40	29.0	1	0.42
738	... ..	9.0	1	15	30	9.95	129	33	27.5	1	0.40
739	29530 Lalande ...	9.5	1	15	31	50.66	47	25	19.7	1	0.46
740	XV 645 W. B. E. ...	8.2	2	15	34	22.58	102	19	15.9	3	0.48
741	XV 676 W. B. E. ...	9.2	3	15	35	56.43	102	41	26.6	3	0.48
742	24 Serpentina ...	2.3	...	15	37	34.18	83	8	39.1	7	0.45
743	... ..	9.5	2	15	41	26.72	62	3	16.3	2	0.40
744	... ..	10.0	1	15	42	32.18	61	46	38.9	1	0.39
745	R Serpentina Var. 2 ...	7.4	1	15	44	25.44	74	27	6.8	1	0.50
746	3462 Radcliffe ...	8.0	1	15	46	20.61	47	1	30.6	1	0.46
747	28970 Lalande ...	7.8	1	15	47	57.06	70	49	3.7	1	0.56
748	28980 Lalande ...	6.1	2	15	48	54.37	104	25	44.7	3	0.48
749	16 Ursæ Minoris 3 ...	4.0	...	15	48	59.55	11	47	19.8	2	0.49
750	... ..	9.0	2	15	49	24.72	103	59	1.0	3	0.49
751	29054 Lalande ...	8.6	3	15	50	30.67	104	3	35.5	3	0.42
752	8 Scorpis β^1 ...	2.0	...	15	57	31.94	109	25	48.7	7	0.45
753	... ..	8.3	3	15	59	58.54	105	16	22.1	3	0.43
754	15281 O. A. S. ...	9.3	3	16	0	58.47	105	43	43.2	3	0.41
755	14 Scorpis ν ...	4.3	...	16	4	5.68	109	6	15.7	2	0.35
756	116 R. P. L. ...	6.9	...	16	4	43.76	4	18	46.2	1	0.01
757	15412 O. A. S. ...	9.3	3	16	6	18.59	106	3	7.8	3	0.42
758	15418 O. A. S. ...	8.7	3	16	6	30.91	106	11	31.1	3	0.44
759	1 Ophiuchi 3 ...	3.0	...	16	7	13.22	93	20	30.5	5	0.50
760	15544 O. A. S. ...	8.7	3	16	12	46.73	106	45	6.3	3	0.41
761	20 Scorpis σ ...	3.3	...	16	12	55.52	115	15	47.4	3	0.41
762	15552 O. A. S. ...	9.2	1	16	13	13.80	107	22	1.0	1	0.50
763	... ..	8.9	1	16	15	46.22	128	7	41.2	1	0.46
764	21 Scorpis a (<i>Antares</i>) ...	1.3	...	16	21	4.32	116	7	36.9	10	0.47
765	30 Herculis γ Var. 5 ...	5.5	1	16	24	10.48	47	49	3.4	1	0.46
766	13 Ophiuchi 3 ...	3.3	...	16	29	40.28	100	17	1.7	1	0.54
767	5784 Brisbane ...	9.5	1	16	30	51.60	150	39	20.0	1	0.40
768	40 Herculis 3 ...	2.7	...	16	36	9.60	58	8	57.5	7	0.52
769	... ..	10.0	1	16	44	52.56	75	16	44.4	1	0.42
770	27 Ophiuchi κ ...	3.7	...	16	51	13.52	80	24	40.0	7	0.56

739. 747. — Comparison stars for Comet 2, 1862.

740. — 741. — 748. — 750. — 751. — 753. — 754. — 757. — 758. — 760. — Comparison stars for Sappho in 1864

745. — R Serpentina Var. 2 — Period 368 days — Range, 6th to 11th magnitude

756. — 2423 Carrington.

765. — 30 Herculis γ Var. 5. — Changes irregularly from 5th to 6.3 magnitude

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
736	5 Corona Borealis a	+ 2 5294	+ 0 0028	+ 0 000	+ 12 253	- 0 207	+ 0 07	6143
737	... ..	+ 3 6749	+ 0 0224	..	+ 12 282	- 0 129	..	..
738	.. ..	+ 3 9487	+ 0 0314	..	+ 12 197	- 0 463	..	..
739	28530 Lalande	+ 2 0014	+ 0 0025	..	+ 12 080	- 0 249	..	..
740	XV 645 W. B. E.	+ 3 3071	+ 0 0125	..	+ 11 908	- 0 303	..	..
741	XV 675 W. B. E.	+ 3 3156	+ 0 0126	..	+ 11 792	- 0 396	..	..
742	24 Serpentis a	+ 2 9413	+ 0 0062	+ 0 009	+ 11 677	- 0 354	- 0 06	6146
743	... ..	+ 2 4886	+ 0 0027	..	+ 11 399	- 0 304	..	..
744	... ..	+ 2 4795	+ 0 0027	..	+ 11 320	- 0 304	..	..
745	R Serpentis Var. 2	+ 2 7634	+ 0 0043	..	+ 11 183	- 0 310	..	..
746	3462 Bodeffe	+ 2 0823	+ 0 0033	..	+ 11 044	- 0 232	..	..
747	28970 Lalande	+ 2 6821	+ 0 0039	..	+ 10 925	- 0 338	..	..
748	28989 Lalande	+ 3 3614	+ 0 0127	..	+ 10 856	- 0 417	..	..
749	16 Ursa Minoris 3	- 2 3157	+ 0 2043	+ 0 029	+ 10 850	+ 0 279	+ 0 06	6256
750	... ..	+ 3 3524	+ 0 0125	..	+ 10 819	- 0 417	..	..
751	29054 Lalande	+ 3 3549	+ 0 0125	..	+ 10 738	- 0 418	..	..
752	8 Scorpii β^1	+ 3 4778	+ 0 0142	- 0 002	+ 10 214	- 0 441	+ 0 02	6329
753	.. ..	+ 3 3883	+ 0 0123	..	+ 10 029	- 0 432	..	..
754	15281 O. A. S.	+ 3 3990	+ 0 0124	..	+ 9 953	- 0 435	..	..
755	14 Scorpii γ	+ 3 4772	+ 0 0136	- 0 002	+ 9 715	- 0 445	+ 0 03	6382
756	116 R. P. L.	- 12 4940	+ 1 7618	..	+ 9 667	+ 1 598	..	..
757	15412 O. A. S.	+ 3 4104	+ 0 0122	..	+ 9 545	- 0 442	..	..
758	15418 O. A. S.	+ 3 4135	+ 0 0123	..	+ 9 529	- 0 442	..	..
759	1 Ophiuchi δ	+ 3 1408	+ 0 0081	- 0 006	+ 9 476	- 0 408	+ 0 13	6414
760	15344 O. A. S.	+ 3 4313	+ 0 0119	..	+ 9 044	- 0 451	..	..
761	20 Scorpii ϵ	+ 3 6354	+ 0 0156	- 0 008	+ 9 083	- 0 478	- 0 01	6447
762	15552 O. A. S.	+ 3 4457	+ 0 0121	..	+ 9 009	- 0 453	..	..
763	.. ..	+ 4 0148	+ 0 0233	..	+ 8 810	- 0 530	..	..
764	21 Scorpii a (Antares)	+ 3 6076	+ 0 0150	- 0 001	+ 8 391	- 0 491	+ 0 08	6496
765	30 Hercules Var. 5	+ 1 9649	+ 0 0042	+ 0 005	+ 8 144	- 0 295	- 0 07	6523
766	13 Ophiuchi 3	+ 3 2963	+ 0 0088	+ 0 001	+ 7 701	- 0 447	- 0 08	6548
767	5781 Brisbane	+ 5 2731	+ 0 0545	..	+ 7 601	- 0 715	..	6554
768	40 Hercules 3	+ 2 2963	+ 0 0033	- 0 004	+ 7 175	- 0 316	- 0 45	6604
769	... ..	+ 2 7325	+ 0 0039	..	+ 6 427	- 0 281	..	..
770	27 Ophiuchi ϵ	+ 2 8562	+ 0 0044	- 0 023	+ 5 928	- 0 602	- 0 02	6704

749-766 Proper Motions adopted from "Greenwich Catalogue."

770.—Proper Motion adopted from "Sears's Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimation.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
771	16232 O. A. S. ...	9.8	1	16	53	57.53	110	14	43.5	1	0.56
772	16233 O. A. S. ...	8.0	1	16	53	58.62	110	23	35.0	1	0.53
773	... ..	7.7	1	16	55	16.87	109	56	33.8	1	0.42
774	22 Ursa Minoris ϵ ...	4.0	...	17	0	1.41	7	44	41.4	6	0.55
775	35 Ophiuchi η ...	2.3	...	17	2	34.87	105	33	10.3	2	0.42
776	... ..	9.0	1	17	5	44.18	130	50	23.7	1	0.56
777	64 Herculis α Var. 1 ...	3.0	...	17	8	26.77	75	27	8.4	8	0.55
778	... ..	8.2	1	17	9	1.79	124	4	16.2	1	0.49
779	... ..	9.8	1	17	11	57.45	130	27	39.3	1	0.56
780	8017 Taylor ...	6.7	1	17	13	21.23	114	45	54.6	3	0.49
781	42 Ophiuchi θ ...	3.3	...	17	13	39.58	114	51	36.4	5	0.56
782	44 Ophiuchi δ ...	5.0	1	17	18	3.97	114	2	48.4	1	0.62
783	3 Arct ...	6.7	1	17	18	49.67	150	33	55.7	2	0.48
784	... ..	8.3	1	17	21	22.44	130	32	55.8	1	0.56
785	... ..	8.4	1	17	21	22.60	130	50	57.0	1	0.62
786	... ..	8.7	1	17	28	25.03	125	14	39.7	1	0.53
787	55 Ophiuchi α ...	2.0	...	17	28	37.24	77	20	18.4	5	0.55
788	... ..	8.9	1	17	29	22.80	130	56	24.1	1	0.56
789	... ..	9.3	1	17	34	34.46	126	15	0.4	1	0.56
790	... ..	9.8	1	17	39	16.94	127	17	24.4	1	0.56
791	... ..	8.5	1	17	39	43.84	127	14	36.4	1	0.54
792	86 Herculis μ ...	3.3	...	17	41	8.20	62	11	52.4	2	0.56
793	31 Draconis ψ^1 (1st) ...	6.5	1	17	44	22.18	17	47	6.9	1	0.46
794	... ..	8.9	1	17	45	2.60	128	47	39.5	1	0.60
795	7504 Lacaille ...	7.0	1	17	48	32.17	129	7	18.6	1	0.60
796	... ..	8.7	3	17	50	35.20	130	50	22.6	3	0.57
797	7518 Lacaille ...	7.0	1	17	52	43.11	140	12	14.6	1	0.62
798	33 Draconis γ (Etaim) ...	2.5	...	17	53	26.91	38	29	39.1	1	0.61
799	8355 Taylor ...	5.5	1	17	56	59.54	133	25	39.0	1	0.60
800	... ..	9.2	2	18	1	13.76	131	43	35.0	2	0.58
801	... ..	9.0	1	18	2	49.27	131	40	29.2	1	0.56
802	T Herculis Var. 4 ...	8.2	1	18	3	57.37	53	59	52.7	1	0.62
803	13 Sagittarii μ ...	4.5	...	18	5	37.75	111	5	27.7	4	0.61
804	15 Sagittarii ...	5.0	1	18	7	6.02	110	45	54.7	1	0.62
805	8461 Taylor ...	6.1	1	18	14	24.47	134	10	24.5	1	0.62

777.— α Herculis Var. 1.—Changes irregularly between 3rd and 4th magnitudes.

786.—789—791.—795—799.—800.—801.—Comparison stars for Donati's Comet of 1858.

802.—T Herculis Var. 4.—Period 165 days.—Range, 7.5 to 12th magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
771	16232 O. A. S. ...	+ 3.5449	+ 0.0093	...	+ 5.690	- 0.498	...	...
772	16233 O. A. S. ...	+ 3.5486	+ 0.0093	...	+ 5.698	- 0.498	...	...
773	.. ..	+ 3.5380	+ 0.0091	...	+ 5.590	- 0.498	...	...
774	22 Ursæ Minoris ϵ ...	+ 6.4245	+ 0.3038	+ 0.009	+ 5.188	+ 0.908	- 0.01	5780
775	35 Ophiuchi γ ...	+ 3.4325	+ 0.0074	+ 0.001	+ 4.972	- 0.457	- 0.13	5781
776	.. ..	+ 4.1956	+ 0.0148	...	+ 4.704	- 0.597	...	...
777	64 Herculis α Var. 1. ...	+ 2.7338	+ 0.0085	- 0.003	+ 4.473	- 0.301	- 0.04	5821
778	.. ..	+ 3.9540	+ 0.0113	...	+ 4.424	- 0.563	...	...
779	.. ..	+ 4.1875	+ 0.0182	...	+ 4.173	- 0.599	...	...
780	8017 Taylor ...	+ 3.6761	+ 0.0080	...	+ 4.053	- 0.527	...	5846
781	42 Ophiuchi θ ...	+ 3.6788	+ 0.0090	- 0.003	+ 4.028	- 0.528	- 0.02	5851
782	44 Ophiuchi δ ...	+ 3.6557	+ 0.0073	- 0.002	+ 3.649	- 0.527	+ 0.13	5876
783	8 Argo ...	+ 5.4035	+ 0.0269	- 0.000	+ 3.584	- 0.778	+ 0.09	5877
784	.. ..	+ 4.1997	+ 0.0109	...	+ 3.364	- 0.605	...	...
785	.. ..	+ 4.2118	+ 0.0110	...	+ 3.364	- 0.607	...	...
786	.. ..	+ 4.0077	+ 0.0079	...	+ 2.755	- 0.580	...	...
787	55 Ophiuchi α ...	+ 2.7745	+ 0.0080	+ 0.004	+ 2.737	- 0.492	+ 0.20	5941
788	.. ..	+ 4.2215	+ 0.0091	...	+ 2.671	- 0.611	...	...
789	.. ..	+ 4.0465	+ 0.0069	...	+ 2.221	- 0.587	...	...
790	.. ..	+ 4.0860	+ 0.0061	...	+ 1.811	- 0.594	...	...
791	.. ..	+ 4.0846	+ 0.0060	...	+ 1.771	- 0.594	...	...
792	86 Herculis μ ...	+ 2.3694	+ 0.0025	- 0.026	+ 1.649	- 0.346	+ 0.74	6021
793	31 Draconis ψ^1 (1st) ...	- 1.0861	+ 0.0155	- 0.002	+ 1.367	+ 0.157	+ 0.26	6047
794	.. ..	+ 4.1446	+ 0.0049	...	+ 1.308	- 0.604	...	...
795	7504 Lacaille ...	+ 4.1578	+ 0.0042	...	+ 1.002	- 0.606	...	...
796	.. ..	+ 4.2267	+ 0.0042	...	+ 0.838	- 0.616	...	...
797	7518 Lacaille ...	+ 5.3142	+ 0.0052	...	+ 0.637	- 0.775	...	...
798	33 Draconis γ ...	+ 1.3915	+ 0.0090	0.000	+ 0.573	- 0.208	+ 0.04	6091
799	8355 Taylor ...	+ 4.3375	+ 0.0024	- 0.006	+ 0.263	- 0.632	+ 0.12	6112
800	.. ..	+ 4.2644	+ 0.0011	...	- 0.107	- 0.622	...	...
801	.. ..	+ 4.2650	+ 0.0007	...	- 0.247	- 0.623	...	...
802	T Herculis Var. 4 ...	+ 2.2688	+ 0.0021	...	- 0.316	- 0.331	...	...
803	13 Sagittarii μ ...	+ 2.5875	+ 0.0009	- 0.004	- 0.492	- 0.523	+ 0.01	6168
804	15 Sagittarii ...	+ 2.5788	+ 0.0008	- 0.005	- 0.621	- 0.523	+ 0.02	6179
805	8461 Taylor ...	+ 4.3684	- 0.0028	...	- 1.380	- 0.634	...	6224

783-799.—Proper Motions adopted from "Stone's Catalogue."

804.—Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
806	23 Ursæ Minoris δ ...	4.5	...	18	16	13.39	3	23	46.6	6	0.39
807	21 Sagittarii ...	5.0	1	18	17	14.94	110	36	40.7	1	0.62
808	3 ¹ Telescopii ...	6.5	2	18	21	58.19	135	50	46.0	2	0.58
809	... ..	9.0	1	18	22	51.47	135	15	51.9	1	0.56
810	9 Coronæ Australis ...	6.0	1	18	23	47.14	132	24	22.3	1	0.63
811	3 Lyræ α (Vega) ...	1.0	...	18	32	19.97	51	20	29.2	4	0.61
812	R Scuti Var. 1 ...	6.0	1	18	40	13.20	95	50	53.3	1	0.64
813	7872 Lacaille ...	6.0	1	18	42	20.14	136	45	1.7	1	0.63
814	7878 Lacaille ...	7.0	1	18	42	53.19	136	44	39.6	1	0.63
815	10 Lyræ β Var. 1... ..	4.0	...	18	45	3.41	56	47	36.3	3	0.66
816	... ..	9.7	1	18	46	54.04	137	44	56.1	1	0.65
817	37 Sagittarii 1 ¹ ...	4.0	...	18	49	36.78	111	16	55.7	1	0.54
818	13 Lyræ Var. 2 ...	4.3	...	18	51	11.38	46	13	54.3	1	0.61
819	... ..	7.9	2	18	54	10.43	122	56	13.2	2	0.60
820	... ..	10.0	2	18	57	17.42	111	21	8.9	2	0.63
821	17 Aquilæ 5 ...	3.3	...	18	59	9.45	76	20	11.7	7	0.66
822	... ..	9.5	...	19	0	51.71	82	1	34.1	1	0.59
823	41 Sagittarii π ...	4.5	...	19	1	40.55	111	14	12.3	1	0.54
824	... ..	9.0	1	19	3	6.08	139	22	42.7	1	0.65
825	... ..	8.0	2	19	3	13.49	122	51	6.1	2	0.56
826	T Sagittarii Var. 3 ...	8.0	4	19	8	23.18	107	12	22.8	4	0.61
827	R Sagittarii Var. 1 ...	10.0	1	19	8	42.57	100	32	38.4	1	0.65
828	... ..	9.5	1	19	9	6.37	109	32	47.9	1	0.64
829	43 Sagittarii d ...	5.0	1	19	9	40.56	100	11	30.8	1	0.62
830	... ..	8.1	1	19	10	0.19	107	9	40.9	1	0.70
831	25 Aquilæ ω ...	5.7	...	19	11	25.88	78	38	51.0	4	0.64
832	44 Sagittarii p^1 ...	4.3	...	19	13	46.80	108	6	1.0	1	0.62
833	... ..	8.2	3	19	16	34.39	129	52	46.6	3	0.60
834	30 Aquilæ δ ...	3.5	...	19	18	39.37	87	9	14.5	7	0.65
835	52 Sagittarii h^1 ...	5.0	...	19	28	25.64	115	10	49.9	3	0.66
836	8173 Lacaille ...	8.8	1	19	31	36.73	143	15	31.5	1	0.64
837	R Cygni Var. 3 ...	9.7	2	19	33	12.30	40	4	50.7	2	0.64
838	... ..	9.0	1	19	34	23.47	127	17	3.4	1	0.65
839	50 Aquilæ γ ...	3.0	...	19	39	47.49	79	42	57.4	3	0.65
840	S Vulpeculæ Var. 3 ..	9.6	1	19	42	49.26	63	3	1.8	2	0.64

810.—813.—814.—Comparison stars for Donati's Comet of 1858.

812.—R Scuti Var. 1.—Period 71 days.—Range, 5th to 8th magnitude.

815.— β Lyræ Var. 1.—Period 12.91 days.—Range, 3.5 to 4.5 magnitude.

819.—13 Lyræ Var. 2.—Period 46 days.—Range, 4.2 to 4.6 magnitude.

819.—825.—Comparison stars for Diana in 1864.

820.—Observed by mistake for Eunomia.

828.—T Sagittarii Var. 3.—Period 381 days.—Range, 7.5 magnitude to invisibility.

827.—R Sagittarii Var. 1.—Period 270 days.—Range, 7th magnitude to invisibility.

837.—R Cygni Var. 3.—Period 425 days.—Range, 7th magnitude to invisibility.

840.—S Vulpeculæ Var. 3.—Period 67.5 days.—Range, 8.5 to 9.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		s	s	s	"	"	"	
806	23 Ursa Minoris δ ..	- 19.3984	- 0.4743	+ 0.018	- 1.418	+ 2.823	- 0.08	6351
807	21 Sagittarii ...	+ 3.5735	- 0.0004	- 0.003	- 1.608	- 0.519	+ 0.02	6347
808	1 st Telescopii ...	+ 4.4429	- 0.0055	- 0.003	- 1.020	- 0.643	+ 0.05	6382
809	... ..	+ 4.4148	- 0.0050	...	- 1.997	- 0.640	...	...
810	θ Coronae Australis ...	+ 4.2866	- 0.0040	0.000	- 2.078	- 0.620	+ 0.03	6395
811	3 Lyrae α (Vega) ...	+ 2.0130	+ 0.0016	+ 0.017	- 3.820	- 0.290	- 0.28	6355
812	R Scuti Var. 1 ...	+ 3.2069	- 0.0011	...	- 3.501	- 0.453	...	...
813	7572 Lacaille ...	+ 4.4693	- 0.0122	...	- 3.683	- 0.630	...	...
814	7578 Lacaille ...	+ 4.4684	- 0.0124	...	- 3.731	- 0.639	...	...
815	10 Lyrae β Var. 1 ...	+ 2.2137	+ 0.0015	- 0.002	- 3.917	- 0.315	+ 0.03	6429
816	... ..	+ 4.5132	- 0.0142	...	- 4.076	- 0.643	...	...
817	37 Sagittarii 1 st ...	+ 3.2606	- 0.0013	- 0.001	- 4.308	- 0.508	+ 0.03	6461
818	13 Lyrae Var. 2 ...	+ 1.8232	+ 0.0008	- 0.001	- 4.443	- 0.257	0.00	6476
819	... ..	+ 3.0142	- 0.0085	...	- 4.696	- 0.563	...	...
820	... ..	+ 3.5786	- 0.0053	...	- 4.961	- 0.503	...	...
821	17 Aquilae γ ...	+ 2.7578	+ 0.0003	- 0.006	- 5.119	- 0.357	+ 0.07	6525
822	... ..	+ 2.8914	- 0.0004	...	- 5.263	- 0.406	...	...
823	41 Sagittarii π ...	+ 3.5730	- 0.0057	- 0.004	- 5.332	- 0.500	+ 0.03	6548
824	... ..	+ 4.5721	- 0.0208	...	- 5.453	- 0.610	...	...
825	... ..	+ 3.9028	- 0.0100	...	- 5.463	- 0.546	...	...
826	T. Sagittarii Var. 3 ...	+ 3.4678	- 0.0054	...	- 5.896	- 0.490	...	...
827	R Sagittarii Var. 1 ...	+ 3.6256	- 0.0060	...	- 5.923	- 0.488	...	...
828	... ..	+ 3.6254	- 0.0061	...	- 5.956	- 0.488	...	...
829	43 Sagittarii δ ...	+ 3.5161	- 0.0061	- 0.004	- 6.004	- 0.486	- 0.01	6584
830	... ..	+ 3.4659	- 0.0055	...	- 6.080	- 0.479	...	...
831	25 Aquilae ω ...	+ 2.8165	- 0.0003	- 0.003	- 6.150	- 0.388	- 0.02	6596
832	44 Sagittarii ρ^1 ...	+ 3.4867	- 0.0061	- 0.008	- 6.345	- 0.480	- 0.03	6619
833	... ..	+ 4.1274	- 0.0164	...	- 6.576	- 0.563	...	...
834	30 Aquilae δ ...	+ 3.0024	- 0.0018	+ 0.014	- 6.748	- 0.410	- 0.10	6644
835	52 Sagittarii λ^1 ...	+ 3.6543	- 0.0102	+ 0.002	- 7.848	- 0.490	- 0.02	6706
836	8173 Lacaille ...	+ 3.7219	- 0.0858	...	- 7.805	- 0.631	...	...
837	R Cygni Var. 3 ...	+ 1.0129	- 0.0013	...	- 7.983	- 0.213	...	...
838	... ..	+ 4.0048	- 0.0179	...	- 8.029	- 0.533	...	...
839	50 Aquilae γ ...	+ 2.8520	- 0.0011	+ 0.001	- 8.459	- 0.372	0.00	6772
840	S Vulpeculae Var. 3 ...	+ 2.4593	+ 0.0011	...	- 8.607	- 0.319	...	...

808-810 — Proper Motions adopted from "Stellar Catalogue."

818 — Proper Motions adopted from "Greenwich Catalogue."

Mean Positions of Stars for 1864 January 1st.

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
841	53 Aquilæ α (Altaïr) ..	1.3	...	19	44	8.79	81	29	18.2	2	0.65
842	χ Cygni Var. 2 ..	6.0	2	19	45	20.36	57	25	43.0	2	0.60
843	55 Aquilæ η Var. 1 ..	4.0	...	19	45	32.45	89	20	27.9	1	0.59
844	60 Aquilæ β ..	4.5	...	19	48	27.84	83	55	50.9	4	0.66
845	... ..	8.5	1	19	49	33.81	145	56	51.6	1	0.70
146	... ..	9.0	2	19	53	0.36	147	10	53.2	2	0.63
847	... ..	9.1	1	19	55	35.36	151	51	39.1	1	0.75
848	9208 Taylor ..	5.3	2	19	55	41.75	122	26	6.0	2	0.61
849	λ Uram Minoris ..	6.3	...	20	0	7.03	1	5	54.6	4	0.42
850	20046 O. A. N. ..	9.2	1	20	2	39.55	32	23	32.3	1	0.54
851	R Capricorni Var. 1 ..	9.1	1	20	3	40.42	104	40	4.6	1	0.65
852	S Aquilæ Var. 4 ..	9.1	2	20	5	21.88	74	46	56.4	2	0.67
853	... ..	9.0	1	20	7	41.31	81	22	28.8	1	0.69
854	20356 O. A. S. ..	8.2	1	20	8	22.17	110	26	8.1	1	0.75
855	... ..	7.0	1	20	10	28.82	149	9	1.6	1	0.70
856	6 Capricorni α ³ ..	3.5	..	20	10	30.27	102	57	50.1	7	0.65
857	39045 Lalande ..	6.4	2	20	12	4.98	50	3	16.4	2	0.68
858	α Pavonis ..	2.0	...	20	14	51.99	147	10	2.1	3	0.70
859	8441 Lacaille ..	8.3	2	20	18	13.10	121	6	58.9	2	0.66
860	11 Capricorni ρ ..	5.0	...	20	21	5.91	108	15	38.3	7	0.66
861	39525 Lalande ..	7.0	1	20	24	56.21	86	2	29.2	2	0.72
862	... ..	8.3	3	20	27	13.08	121	5	54.0	3	0.68
863	... ..	8.9	1	20	27	50.62	143	16	24.8	1	0.63
864	24 Cephei Rev. Var ..	8.9	1	20	28	6.07	1	17	6.8	2	0.19
865	143 R. P. L. ..	6.7	...	20	29	42.23	5	18	29.0	2	0.45
866	... ..	8.5	1	20	29	45.35	143	52	1.4	1	0.72
867	... ..	8.0	2	20	30	52.41	149	55	23.2	2	0.76
868	14 Capricorni τ ² ..	5.7	...	20	31	39.85	105	25	45.7	1	0.62
869	S Capricorni Var. 2 ..	9.0	2	20	33	57.28	109	22	21.9	2	0.64
870	... ..	8.7	1	20	36	32.04	148	23	33.4	1	0.76
871	50 Cygni α (Deneb) ..	1.7	...	20	36	47.68	45	12	16.4	3	0.69
872	... ..	9.0	1	20	38	8.49	143	3	17.3	1	0.65
873	2 Aquarii ϵ ..	4.5	...	20	40	18.60	99	59	29.5	2	0.62
874	... ..	10.5	1	20	41	8.55	105	18	21.3	1	0.64
875	T Aquarii Var. 4 ..	8.7	4	20	42	45.58	95	28	58.1	4	0.68

842.— χ Cygni Var. 2.—Period 406 days.—Range, 4th magnitude to invisibility.843.— η Aquilæ Var. 1.—Period 7.176 days.—Range, 3.6 to 4.7 magnitude.850.—Comparison star α / S Cygni Var. 4.

851.—R Capricorni Var. 1.—Period 347 days.—Range, 9th magnitude to invisibility.

852.—S Aquilæ Var. 4.—Period 147 days.—Range, 9th to 11.5 magnitude.

854.—Comparison star for Parthenope in 1862.

864.—R Uram Minoris Var. 1.—Variable from 5th to 11th magnitude in many years.

865.—3129 Carrington.

869.—S Capricorni Var. 2.—Supposed to change from 9th to 11th magnitude.

875.—T Aquarii Var. 4.—Period 203 days.—Range, 7th to 12.5 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
841	54 Aquilæ <i>a</i> (<i>Altair</i>)...	+ 2 8022	- 0 0014	+ 0 036	- 8 804	- 0 374	- 0 38	0802
842	χ Cygni Var. 2	+ 2 3077	+ 0 0013	...	- 8 803	- 0 297	...	...
843	55 Aquilæ γ Var. 1	+ 2 0583	- 0 0031	- 0 001	- 8 012	- 0 303	+ 0 04	0811
844	60 Aquilæ β ...	+ 2 0455	- 0 0020	+ 0 002	- 9 154	- 0 378	+ 0 47	0823
845	... ..	+ 4 8283	- 0 0479	...	- 9 227	- 0 621	...	...
846	... ..	+ 4 8983	- 0 0523	...	- 9 492	- 0 626	...	...
847	... ..	+ 5 2007	- 0 0700	...	- 9 601	- 0 668	...	...
848	9208 Taylor	+ 3 8157	- 0 0175	...	- 9 701	- 0 483	...	0877
849	λ Ursæ Minoris	- 57 2940	- 29 8376	- 0 035	- 10 037	+ 7 238	- 0 01	6909
850	20046 O. A. N	+ 1 2594	- 0 0074	...	- 10 228	- 0 154	...	...
851	11 Capricorni Var. 1	+ 3 3723	- 0 0087	...	- 10 305	- 0 418	...	...
852	S Aquilæ Var. 4	+ 2 7615	- 0 0004	...	- 10 431	- 0 340	...	...
853	... ..	+ 2 8999	- 0 0017	...	- 10 604	- 0 354	...	...
854	20355 O. A. S.	+ 3 4941	- 0 0116	...	- 10 653	- 0 427	...	...
855	... ..	+ 4 9574	- 0 0649	...	- 10 811	- 0 604	...	...
856	6 Capricorni α^2	+ 3 3312	- 0 0084	+ 0 001	- 10 814	- 0 403	0 00	6974
857	39045 Lalande	+ 2 1327	+ 0 0017	...	- 10 929	- 0 256	...	6986
858	α Pavonis	+ 4 7954	- 0 0594	0 000	- 11 133	- 0 574	+ 0 10	7004
859	8441 Lacaille...	+ 3 7367	- 0 0192	...	- 11 375	- 0 444	...	...
860	11 Capricorni ρ	+ 3 4322	- 0 0115	- 0 006	- 11 582	- 0 403	+ 0 01	7042
861	39525 Lalande	+ 2 9974	- 0 0031	...	- 11 855	- 0 347	...	...
862	... ..	+ 3 7178	- 0 0200	...	- 12 015	- 0 429	...	...
863	... ..	+ 4 5089	- 0 0518	...	- 12 030	- 0 520	...	...
864	24 Cephei Rev. Var.	- 44 4910	- 23 9972	...	- 12 076	+ 5 186	...	7144
865	143 R. P. L. ...	- 8 3554	- 1 2622	...	- 12 188	+ 0 973	...	...
866	... ..	+ 4 5261	- 0 0535	...	- 12 192	- 0 519	...	...
867	... ..	+ 4 5982	- 0 0712	...	- 12 270	- 0 520	...	...
868	14 Capricorni τ^2	+ 3 3631	- 0 0105	- 0 002	- 12 325	- 0 382	+ 0 08	7127
869	S Capricorni Var. 2	+ 3 4434	- 0 0128	...	- 12 481	- 0 385	...	...
870	... ..	+ 4 7576	- 0 0004	...	- 12 638	- 0 533	...	...
871	50 Cygni α (<i>Denab</i>)...	+ 2 0433	+ 0 0021	- 0 002	- 12 675	- 0 226	0 00	7171
872	... ..	+ 4 4431	- 0 0530	...	- 12 766	- 0 495	...	...
873	2 Aquarii ϵ ...	+ 3 2523	- 0 0084	- 0 001	- 12 711	- 0 357	+ 0 01	7196
874	... ..	+ 3 3512	- 0 0109	...	- 12 967	- 0 367	...	...
875	T Aquarii Var. 4	+ 3 1724	- 0 0066	...	- 13 076	- 0 345	...	...

858.—Proper Motions adopted from "Stellar Catalogue."

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	°	'	"		
876	8571 Lacaille	8.0	2	20	42	53.12	150	12	58.0	2	0.73
877	9633 Taylor	7.4	2	20	41	34.19	101	56	47.2	2	0.69
878	6 Aquarii μ	5.0	...	20	45	19.11	99	20	29.2	2	0.70
879	... ..	8.8	1	20	48	36.01	140	1	17.4	1	0.65
880	32 Vulpeculae	5.0	...	20	48	45.82	62	27	29.5	9	0.70
881	... ..	9.0	1	20	50	40.81	148	45	51.9	1	0.70
882	8635 Lacaille	7.4	3	20	52	18.63	126	35	2.8	3	0.71
883	23 Capricorni θ	5.0	...	20	55	18.93	107	46	16.1	1	0.77
884	R Vulpeculae Var. 2 ...	8.5	2	20	58	20.25	66	43	3.3	2	0.67
885	... ..	9.2	1	20	58	35.34	148	52	36.7	1	0.75
886	9773 Taylor	8.1	2	21	0	27.27	145	7	16.6	2	0.72
887	61 Cygni (1st)	5.3	...	21	0	48.17	51	55	4.3	3	0.67
888	13 Aquarii ν	4.7	...	21	2	10.85	101	55	14.0	2	0.70
889	... ..	9.6	2	21	2	54.46	145	6	44.7	2	0.73
890	8712 Lacaille	8.5	1	21	4	11.07	146	48	32.8	1	0.74
891	64 Cygni 3	3.5	...	21	7	8.89	60	19	47.3	9	0.69
892	T Capricorni Var. 3 ...	9.1	3	21	14	25.65	105	40	11.5	3	0.67
893	5 Cephei α (Alderamin) ...	2.7	...	21	15	19.98	27	50	24.9	3	0.60
894	9931 Taylor	6.7	3	21	18	41.84	142	53	23.1	3	0.73
895	... ..	8.2	1	21	20	5.57	150	47	50.8	1	0.77
896	22 Aquarii β	3.0	...	21	24	23.81	96	10	4.8	14	0.69
897	... ..	7.9	1	21	25	49.17	140	23	25.6	1	0.70
898	8 Cephei β	3.3	...	21	26	53.87	20	2	9.1	3	0.69
899	... ..	9.5	1	21	27	4.39	132	38	18.9	1	0.74
900	... ..	9.3	1	21	28	50.12	134	4	22.2	1	0.74
901	... ..	9.0	2	21	29	29.23	134	2	30.3	2	0.76
902	... ..	9.0	1	21	29	53.40	98	25	25.9	1	0.77
903	23 Aquarii ξ	5.3	...	21	30	30.57	98	27	44.8	3	0.68
904	10032 Taylor	6.4	1	21	30	41.50	142	58	15.0	1	0.68
905	10065 Taylor	6.4	1	21	31	27.98	145	7	5.3	1	0.70
906	... ..	9.1	2	21	34	41.34	131	0	27.2	2	0.74
907	8 Pegasi ϵ	2.5	...	21	37	30.34	80	44	50.1	10	0.74
908	10136 Taylor	7.0	1	21	40	50.34	137	14	24.3	1	0.74
909	XXI 975 W. H. E. ...	9.0	3	21	41	9.82	97	19	45.6	3	0.65
910	... ..	9.1	2	21	42	52.93	132	31	26.0	2	0.75

884.—R Vulpeculae Var. 2.—Period 138 days.—Range, 8th to 13th magnitude.

892.—T Capricorni Var. 3.—Period 269 days.—Range, 9th magnitude to invisibility.

909.—Comparison star for Ariadne in 1864.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
876	8571 Lacaille	+ 4.3426	- 0.0787	...	- 13.064	- 0.229	...	...
877	9633 Taylor ...	+ 3.2848	- 0.0093	...	- 13.198	- 0.355	...	7232
878	6 Aquarii ...	+ 3.2399	- 0.0063	0.000	- 13.244	- 0.349	+ 0.04	7239
879	... ..	+ 4.7231	- 0.0745	...	- 13.453	- 0.205	...	...
880	32 Vulpeculæ	+ 2.6554	+ 0.0026	- 0.002	- 13.469	- 0.270	0.00	7266
881	... ..	+ 4.6931	- 0.0739	...	- 13.503	- 0.497	...	...
882	8635 Lacaille...	+ 3.7909	- 0.0272	...	- 13.607	- 0.308	...	...
883	23 Capricorni θ	+ 3.3771	- 0.0129	+ 0.004	- 14.077	- 0.345	+ 0.05	7222
884	R Vulpeculæ Var. 2...	+ 2.6623	+ 0.0022	...	- 14.078	- 0.271	...	...
885	... ..	+ 4.6476	- 0.0757	...	- 14.093	- 0.476	...	...
886	9772 Taylor ...	+ 4.4256	- 0.0634	...	- 14.209	- 0.449	...	...
887	61 Cygni (1st)	+ 2.3337	+ 0.0014	+ 0.339	- 14.234	- 0.233	- 3.22	7236
888	13 Aquarii γ...	+ 3.2698	- 0.0098	+ 0.001	- 14.316	- 0.328	+ 0.01	7244
889	... ..	+ 4.4003	- 0.0626	...	- 14.300	- 0.443	...	...
890	8712 Lacaille	+ 4.4907	- 0.0685	...	- 14.438	- 0.448	...	...
891	64 Cygni 3 ...	+ 2.5505	+ 0.0038	- 0.008	- 14.617	- 0.248	+ 0.07	7268
892	T Capricorni Var. 3	+ 3.3201	- 0.0120	...	- 15.045	- 0.314	...	...
893	5 Cepheie (Alderamin)	+ 1.4162	- 0.0071	+ 0.021	- 15.094	- 0.130	- 0.01	7416
894	9931 Taylor ...	+ 4.2157	- 0.0575	...	- 15.290	- 0.291	...	7443
895	... ..	+ 4.6001	- 0.0671	...	- 15.368	- 0.455	...	...
896	22 Aquarii β...	+ 3.1627	- 0.0071	- 0.001	- 15.094	- 0.292	0.00	7478
897	... ..	+ 4.0738	- 0.0516	...	- 15.685	- 0.363	...	...
898	8 Cepheie β	+ 0.8010	- 0.0045	0.000	- 15.744	- 0.065	+ 0.04	7483
899	... ..	+ 3.8340	- 0.0371	...	- 15.754	- 0.339	...	...
900	... ..	+ 3.8653	- 0.0394	...	- 15.849	- 0.328	...	...
901	... ..	+ 3.8615	- 0.0394	...	- 15.884	- 0.337	...	...
902	... ..	+ 3.1927	- 0.0382	...	- 15.905	- 0.376	...	...
903	23 Aquarii 1...	+ 3.1929	- 0.0083	+ 0.004	- 15.937	- 0.276	+ 0.04	7514
904	10082 Taylor	+ 4.1468	- 0.0584	...	- 15.943	- 0.350	...	7513
905	10065 Taylor...	+ 4.3097	- 0.0649	...	- 16.145	- 0.357	...	7540
906	... ..	+ 3.8372	- 0.0394	...	- 16.154	- 0.324	...	...
907	8 Pegasi ε	+ 2.9452	- 0.0005	+ 0.008	- 16.302	- 0.242	0.00	7561
908	10126 Taylor...	+ 3.8963	- 0.0454	...	- 16.473	- 0.317	...	7561
909	XXI 975 W. B. E.	+ 3.1709	- 0.0076	...	- 16.486	- 0.226	...	...
910	... ..	+ 3.7627	- 0.0372	...	- 16.571	- 0.302	...	...

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				h.	m.	s.	'	"			
911	16 Pegasi	5.5	..	21	16	52.40	64	12	50.7	9	0.72
912	8958 Lacaille	7.6	2	21	47	12.80	135	53	10.5	2	0.75
913	... ..	9.3	2	21	47	31.81	133	12	30.1	2	0.75
914	... ..	9.7	1	21	52	40.60	136	38	12.8	1	0.74
915	κ^3 Indi	6.5	1	21	56	15.98	150	17	30.7	1	0.86
916	31 Aquarii ϕ	4.7	...	21	56	16.50	92	48	38.9	1	0.68
917	32 Aquarii	5.6	3	21	57	47.58	91	33	47.1	3	0.71
918	... ..	7.9	2	21	58	11.91	136	2	33.8	2	0.75
919	34 Aquarii α	3.0	...	21	58	47.79	90	58	46.3	10	0.75
920	α Gruis	2.0	...	21	59	38.79	137	37	5.5	1	0.72
921	... ..	9.5	1	22	3	19.55	101	8	51.2	1	0.71
922	XX11 98 W. B. E.	8.0	3	22	6	21.85	90	25	47.5	3	0.68
923	... ..	8.0	1	22	9	5.60	98	22	7.1	2	0.78
924	... ..	9.0	1	22	9	7.81	146	27	23.2	1	0.77
925	43 Aquarii θ	4.7	...	22	9	39.29	98	27	33.9	10	0.77
926	48 Aquarii γ	3.7	...	22	14	37.67	92	4	18.8	3	0.82
927	... ..	8.9	3	22	15	29.86	82	47	29.1	3	0.70
928	... ..	9.4	2	22	16	51.21	135	55	25.2	2	0.75
929	55 Aquarii δ	6.1	3	22	21	49.60	90	42	52.0	3	0.72
930	57 Aquarii σ	5.0	...	22	23	26.76	101	22	23.2	1	0.70
931	150 R. P. L.	5.5	...	22	23	38.63	4	34	42.1	7	0.29
932	27 Cephei δ Var. 1	4.0	...	22	24	7.58	32	16	51.0	1	0.76
933	... ..	9.2	1	22	24	17.62	135	42	9.4	1	0.74
934	... ..	9.7	1	22	24	39.71	146	50	35.2	1	0.77
935	... ..	8.2	1	22	25	51.89	141	30	13.4	1	0.75
936	62 Aquarii η	4.0	...	22	28	21.97	90	49	4.0	9	0.77
937	9188 Lacaille	7.0	2	22	29	53.53	130	33	43.2	2	0.53
938	10477 Taylor	6.2	2	22	32	7.25	148	7	50.5	2	0.77
939	42 Pegasi δ	3.5	...	22	34	40.74	79	52	30.9	5	0.75
940	... ..	8.8	2	22	36	30.50	130	26	50.8	2	0.81
941	9226 Lacaille	6.7	3	22	37	39.08	145	46	40.0	3	0.78
942	XX11 844 W. B. E.	9.0	2	22	40	31.14	57	48	41.1	2	0.75
943	... ..	8.7	2	22	40	51.81	142	38	2.6	2	0.81
944	... ..	8.0	2	22	41	41.47	130	1	17.2	2	0.81
945	... ..	10.2	1	22	41	43.81	145	33	2.5	1	0.77

917.—922 — Comparison stars for Encke's Comet in 1862.

931.—3820 Groombridge.

932.— δ Cephei Var. 2 — Period 5.366 days — Range, 3.7 to 4.9 magnitude.

Observed with the Madras Meridian Circle in that Year.

Number	Star.	In Right Ascension.			In Polar Distance.			Number in B. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
911	16 Pegasi	+ 2.7254	+ 0.0052	+ 0.001	- 16.766	- 0.210	+ 0.01	7027
912	8958 Lacaille	+ 3.8272	- 0.0428	...	- 16.782	- 0.299	...	...
913	... ..	+ 3.3750	- 0.0353	...	- 16.800	- 0.292	...	...
914	... ..	+ 3.8181	- 0.0111	...	- 17.013	- 0.286	...	...
915	κ^2 Indi	- 4.2766	- 0.0845	...	- 17.203	- 0.314	...	7000
916	31 Aquarii ϵ	+ 3.1053	- 0.0051	+ 0.001	- 17.203	- 0.226	+ 0.01	7072
917	32 Aquarii	+ 3.0906	- 0.0046	+ 0.003	- 17.271	- 0.222	+ 0.03	7065
918	... ..	+ 3.7748	- 0.0130	...	- 17.290	- 0.272	...	...
919	34 Aquarii α	+ 3.0836	- 0.0041	- 0.003	- 17.316	- 0.219	+ 0.02	7086
920	ϵ Gruls	+ 3.8065	- 0.0157	+ 0.011	- 17.353	- 0.270	+ 0.13	7092
921	... ..	+ 3.2005	- 0.0093	...	- 17.512	- 0.210	...	...
922	XXII 98 W. B. E	+ 3.0768	- 0.0037	...	- 17.640	- 0.205	...	...
923	... ..	+ 3.1636	- 0.0077	...	- 17.752	- 0.207	...	...
924	... ..	+ 4.0100	- 0.0681	...	- 17.751	- 0.261	...	...
925	43 Aquarii θ	+ 3.1640	- 0.0075	+ 0.006	- 17.775	- 0.205	+ 0.03	7773
926	48 Aquarii γ	+ 3.0935	- 0.0043	+ 0.007	- 17.972	- 0.192	- 0.02	7736
927	... ..	+ 2.9975	0.0000	...	- 18.000	- 0.185	...	...
928	... ..	+ 3.6738	- 0.0422	...	- 18.059	- 0.223	...	...
929	55 Aquarii β	+ 3.0790	- 0.0033	+ 0.009	- 18.243	- 0.178	- 0.03	7632
930	57 Aquarii σ	+ 3.1821	- 0.0088	- 0.004	- 18.301	- 0.182	- 0.06	7640
931	150 R. P. L.	- 3.7427	- 1.1361	+ 0.049	- 18.309	+ 0.231	- 0.05	7651
932	27 Cephei δ Var. 1	+ 2.2123	+ 0.0165	+ 0.002	- 18.326	- 0.123	+ 0.02	7848
933	... ..	+ 3.6278	- 0.0412	...	- 18.332	- 0.206	...	...
934	... ..	+ 3.5990	- 0.0676	...	- 18.345	- 0.221	...	...
935	... ..	+ 3.7433	- 0.0527	...	- 18.357	- 0.210	...	...
936	62 Aquarii η	+ 3.0794	- 0.0031	+ 0.003	- 18.471	- 0.166	+ 0.06	7608
937	9188 Lacaille	+ 3.5105	- 0.0333	...	- 18.525	- 0.185	...	...
938	10177 Taylor	+ 3.8706	- 0.0708	...	- 18.599	- 0.208	...	7869
939	42 Pegasi β	+ 2.9651	+ 0.0023	+ 0.001	- 18.683	- 0.149	0.00	7698
940	... ..	+ 3.4782	- 0.0327	...	- 18.739	- 0.173	...	...
941	9226 Lacaille	+ 3.7632	- 0.0622	...	- 18.771	- 0.185	...	...
942	XXII 844 W. B. E	+ 3.0547	- 0.0013	...	- 18.861	- 0.143	...	...
943	... ..	+ 3.6645	- 0.0334	...	- 18.872	- 0.162	...	...
944	... ..	+ 3.4344	- 0.0317	...	- 18.962	- 0.151	...	...
945	... ..	+ 3.7007	- 0.0604	...	- 18.963	- 0.166	...	...

916.—Proper Motions from Mr. Stone's list "*Memoirs R. A. S.*" Vol. 23.917.—Proper Motions adopted from "*Greenwich Catalogue.*"920.—Proper Motions adopted from "*Stone's Catalogue.*"

Mean Positions of Stars for 1864 January 1st,

Number.	Star.	Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
				<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
946	... ..	8.2	1	22	44	50.43	148	34	33.0	2	0.73
947	... ..	9.0	1	22	48	3.87	152	35	12.3	1	0.85
948	... ..	9.0	2	22	49	13.15	135	27	53.3	2	0.84
949	S Aquarii Var. 2 ...	...	...	22	49	49.09	111	4	1.0	1	0.72
950	2 Piscis Aus. α (<i>Fomalhaut</i>)	1.3	...	25	50	7.75	120	20	32.8	7	0.82
951	... ..	7.3	2	22	50	19.40	111	0	5.7	2	0.73
952	... ..	8.9	1	22	51	26.12	151	33	15.5	2	0.81
953	9353 Lacaille ...	5.9	1	22	56	36.00	144	41	38.0	1	0.76
954	... ..	8.9	1	22	57	11.27	140	37	59.8	1	0.82
955	53 Pegasi β Var. 1 ...	2.3	...	22	57	11.01	62	39	16.9	1	0.76
956	54 Pegasi α (<i>Markab</i>) ...	2.0	...	22	57	59.18	75	31	34.6	4	0.77
957	... ..	9.1	2	22	59	20.02	150	22	5.6	2	0.83
958	9372 Lacaille ...	8.0	2	23	0	22.71	150	28	12.7	2	0.80
959	9377 Lacaille ...	6.6	2	23	2	12.85	151	18	4.3	2	0.74
960	... ..	9.5	2	23	4	18.03	130	49	15.1	2	0.77
961	9394 Lacaille ...	8.1	3	23	5	9.76	145	50	37.8	3	0.82
962	6 Piscium γ ...	4.3	...	23	10	6.89	87	27	37.5	4	0.75
963	... ..	9.8	1	23	11	5.52	151	15	44.8	1	0.81
964	... ..	9.3	1	23	11	6.18	127	25	34.9	1	0.82
965	... ..	8.6	1	23	11	18.58	136	54	21.5	1	0.86
966	... ..	8.0	1	23	12	7.66	137	3	54.3	1	0.72
967	... ..	8.3	2	23	12	15.07	127	24	50.8	2	0.80
968	96 Aquarii ...	5.5	1	23	12	20.62	95	52	2.5	1	0.69
969	... ..	8.5	4	23	15	17.25	130	46	15.1	4	0.82
970	... ..	9.8	1	23	15	41.65	180	39	46.9	1	0.81
971	... ..	10.0	...	23	19	42.21	151	38	3.9	1	0.82
972	8 Piscium α ...	5.5	...	23	19	57.63	89	29	20.0	8	0.79
973	... ..	8.7	2	23	23	37.19	148	57	35.6	2	0.78
974	... ..	9.9	2	23	25	29.88	129	51	59.6	2	0.81
975	10801 Taylor ...	6.7	1	23	27	29.61	147	34	30.0	1	0.76
976	... ..	8.4	2	23	27	45.78	118	14	46.3	2	0.76
977	188 R. P. L. ...	5.7	...	23	27	49.00	3	26	31.6	5	0.49
978	... ..	8.1	2	23	30	49.44	148	55	17.9	2	0.83
979	... ..	8.3	1	23	30	24.60	148	56	42.9	1	0.82
980	17 Piscium ...	4.5	...	23	32	57.84	85	6	35.9	7	0.78

949 — S Aquarii Var. 2 — Period 279 days — Range, 8th magnitude to invisibility.

955 — β Pegasi Var. 1. (S. Acq.) — Period about 6 weeks. — Range 2.0 to 2.5 magnitudes.

977.—4101 Groombridge.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance			Number in M. A. C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation	Proper Motion.	
		"	"	"	"	"	"	
916	... ..	+ 3 7709	- 0 0097	...	- 18 987	- 0 109	...	...
917	... ..	+ 3 8690	- 0 0854	...	- 19 075	- 0 160	...	...
918	... ..	+ 3 1851	- 0 0388	...	- 19 106	- 0 147	...	...
919	S Aquarii Var. 2	+ 3 2274	- 0 0140	...	- 19 122	- 0 134	...	...
920	2 Piscis Australis a	+ 3 3069	- 0 0210	+ 0 022	- 19 131	- 0 135	+ 0 15	7992
951	... ..	+ 3 2257	- 0 0140	...	- 19 136	- 0 133	...	...
952	... ..	+ 3 7995	- 0 0796	...	- 19 164	- 0 155	...	...
953	9353 Lacaille	+ 3 5878	- 0 0550	...	- 19 293	- 0 135	...	8029
954	... ..	+ 3 6897	- 0 0705	...	- 19 307	- 0 138	...	...
955	53 Pegasi B Var. 1	+ 2 8850	+ 0 0117	+ 0 014	- 19 307	- 0 106	- 0 15	8032
956	54 Pegasi a (Markab)	+ 2 9798	+ 0 0056	+ 0 003	- 19 325	- 0 107	+ 0 02	8034
957	... ..	+ 3 6871	- 0 0728	...	- 19 356	- 0 133	...	...
958	9372 Lacaille	+ 3 6792	- 0 0727	...	- 19 380	- 0 130	...	...
959	9377 Lacaille	+ 3 6814	- 0 0753	...	- 19 420	- 0 126	...	8061
960	... ..	+ 3 3490	- 0 0305	...	- 19 466	- 0 109	...	...
961	9394 Lacaille	+ 3 5391	- 0 0571	...	- 19 483	- 0 114	...	...
962	6 Piscium γ	+ 3 0591	+ 0 0005	+ 0 047	- 19 582	- 0 087	+ 0 01	8106
963	... ..	+ 3 5985	- 0 0721	...	- 19 600	- 0 103	...	...
964	... ..	+ 3 2887	- 0 0264	...	- 19 600	- 0 093	...	...
965	... ..	+ 3 3734	- 0 0382	...	- 19 604	- 0 096	...	...
966	... ..	+ 3 3701	- 0 0384	...	- 19 619	- 0 094	...	...
967	... ..	+ 3 2830	- 0 0263	...	- 19 621	- 0 087	...	...
968	96 Aquarii	+ 3 1004	- 0 0038	+ 0 011	- 19 623	- 0 085	+ 0 01	8119
969	... ..	+ 3 2957	- 0 0296	...	- 19 674	- 0 085	...	...
970	... ..	+ 3 2928	- 0 0296	...	- 19 681	- 0 084	...	...
971	... ..	+ 3 5052	- 0 0703	...	- 19 745	- 0 081	...	...
972	8 Piscium α	+ 3 0699	0 0000	+ 0 005	- 19 750	- 0 080	+ 0 12	8126
973	... ..	+ 3 4232	- 0 0605	...	- 19 808	- 0 070	...	...
974	... ..	+ 3 2396	- 0 0276	...	- 19 828	- 0 062	...	...
975	10804 Taylor	+ 3 3696	- 0 0655	...	- 19 833	- 0 060	...	8206
976	... ..	+ 3 3749	- 0 0672	...	- 19 857	- 0 060	...	...
977	128 R. P. 1.	- 0 0867	- 0 5004	+ 0 084	- 19 858	+ 0 010	- 0 01	8213
978	... ..	+ 3 3633	- 0 0583	...	- 19 862	- 0 055	...	...
979	... ..	+ 3 3579	- 0 0583	...	- 19 888	- 0 064	...	...
980	17 Piscium	+ 3 0585	+ 0 0000	+ 0 025	- 19 916	- 0 042	+ 0 45	8223

955.—D. S.—Proper Motions adopted from "Greenwood's Catalogue"

Mean Positions of Stars for 1864 January 1st.

Number.	Star.				Magnitude.	Estimations.	Mean Right Ascension.			Mean Polar Distance.			Observations.	Fraction of Year.
							<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>		
981	35 Cephei γ	...	...	...	3.3	...	23	33	47.63	13	7	37.5	3	0.80
982	...	...	...	...	9.2	1	23	34	20.29	147	27	26.3	1	0.82
983	...	...	...	...	8.0	1	23	35	11.20	148	42	58.3	1	0.86
984	...	...	...	...	9.2	2	23	36	46.75	106	2	18.8	2	0.75
985	9583 Lacaille	...	...	...	8.7	2	23	38	50.59	129	43	53.6	2	0.79
986	...	...	...	...	9.7	1	23	41	4.67	128	46	38.4	1	0.82
987	3 Sculptoris	...	...	...	4.5	...	23	41	50.21	118	52	56.8	11	0.82
988	...	...	...	...	8.5	1	24	41	58.37	142	4	25.9	1	0.71
989	...	...	...	...	9.4	1	23	42	41.88	150	54	3.2	1	0.85
990	...	...	...	...	9.4	2	23	47	43.66	129	50	58.4	2	0.81
991	9641 Lacaille	...	...	...	7.8	1	23	48	2.04	129	7	14.7	1	0.82
992	...	...	...	...	8.5	1	23	49	57.25	148	53	24.9	1	0.86
993	R Cassiopeæ Var. 3	...	...	...	9.5	1	23	51	30.50	39	22	8.6	1	0.82
994	...	...	...	...	9.0	1	23	51	45.33	152	20	38.6	1	0.85
995	28 Piscium w	...	...	...	4.0	..	23	52	19.68	83	53	23.5	11	0.80
996	9686 Lacaille	...	...	...	6.9	3	23	53	32.44	143	51	15.3	3	0.78
997	...	...	...	...	9.2	2	23	55	58.46	130	17	1.3	2	0.81
998	...	...	...	...	8.0	1	23	56	7.64	124	7	46.0	1	0.86
999	10994 Taylor	...	...	...	7.7	1	23	57	47.27	147	38	0.5	1	0.74
1000	9721 Lacaille	...	...	...	6.9	...	23	59	15.72	139	50	3.3	1	0.86

993.—R Cassiopeæ Var. 3.—Period 426 days.—Range, 5th magnitude to invisibility.

Observed with the Madras Meridian Circle in that Year.

Number.	Star.	In Right Ascension.			In Polar Distance.			Number in R.A.C.
		Annual Precession.	Secular Variation.	Proper Motion.	Annual Precession.	Secular Variation.	Proper Motion.	
		<i>s</i>	<i>s</i>	<i>s</i>	<i>"</i>	<i>"</i>	<i>"</i>	
981	35 Cephei γ ...	+ 3.4179	+ 0.0738	- 0.020	- 19.924	- 0.081	- 0.15	8235
982	... ..	+ 3.3081	- 0.0532	...	- 19.930	- 0.045	...	...
983	... ..	+ 3.3099	- 0.0561	...	- 19.937	- 0.043	...	...
984	... ..	+ 3.1109	- 0.0081	...	- 19.953	- 0.037	...	...
985	9583 Lacaille	+ 3.1709	- 0.0248	...	- 19.970	- 0.084	...	...
986	... ..	+ 3.1607	- 0.0244	...	- 19.967	- 0.020	...	...
987	3 Sculptoris ...	+ 3.1304	- 0.0161	+ 0.009	- 19.992	- 0.026	+ 0.10	8275
988	... ..	+ 3.2039	- 0.0408	...	- 19.993	- 0.028	...	...
989	... ..	+ 3.2533	- 0.0590	...	- 19.998	- 0.027	...	...
990	... ..	+ 3.1297	- 0.0237	...	- 20.026	- 0.015	...	...
991	9641 Lacaille	+ 3.1269	- 0.0230	...	- 20.027	- 0.015	...	...
992	... ..	+ 3.1692	- 0.0512	...	- 20.036	- 0.011	...	...
993	R Cassiopeiæ Var. 3.	+ 3.0117	+ 0.0364	...	- 20.041	- 0.007	...	...
994	... ..	+ 3.1639	- 0.0520	...	- 20.042	- 0.008	...	...
995	28 Piscium ω ...	+ 3.0672	+ 0.0047	+ 0.010	- 20.044	- 0.005	+ 0.13	8331
996	9686 Lacaille	+ 3.1237	- 0.0407	...	- 20.047	- 0.004	...	...
997	... ..	+ 3.0920	- 0.0240	...	- 20.052	+ 0.001	...	...
998	... ..	+ 3.0574	- 0.0185	...	- 20.052	+ 0.001	...	...
999	10994 Taylor	+ 3.0925	- 0.0495	...	- 20.064	+ 0.005	...	...
1000	9721 Lacaille	+ 3.0772	- 0.0336	...	- 20.065	+ 0.003	...	...

987.—Proper Motions adopted from "*Stone's Catalogue*."

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Christiania	... Royal Observatory. Prof. C. Fearnley. O. A. L. Fihl.
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PORTUGAL.

Cuimbra	The Observatory.
Lisbon	... Royal Observatory.

RUSSIA.

Dorpat	... The Observatory.
Helsingfors	.. The Observatory.
Kazan.	... The Observatory.
Kharkoff	... The Observatory.
Kiev	... The Observatory.
Moscow	... The Observatory.
	Prof. Th. Bredechiu.
	Dr. W. Ceraski.
Nicolaiew	... The Observatory.
Odesa	... The Observatory.
Pinsk	... Dr. Jedrzejewica.
Pulkowa	... Central Imperial Observatory.
	Prof. W. Dollen, Geh. Rath.
	Prof. M. Nyren.
	Dr. H. Struve.
	Prof. O. W. von Struve, Geh. Rath.
St. Petersburg	... Imperial Academy of Sciences.
	Observatory of Academy of Sciences
	Dr. J. O. Backlund.
	Prof. S. von Glasenapp.
Taschkent	... The Observatory
Warsaw	... The Observatory.
Wilna	... The Observatory.

SPAIN.

Madrid	... Royal Observatory
San Fernando	... Marine Observatory.

STRAITS SETTLEMENTS.

Singapore	... Surveyor General
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SWEDEN.

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	Dr. F. Eugstrom.
	Prof. A. Moller.
Stockholm	... Royal Academy of Sciences
Upsala	... Prof. H. Gylden.
	The Observatory.
	Prof. H. Schults.
	Dr. H. Thalen.

SWITZERLAND

Geneva	... The Observatory.
	Prof. E. Gantier.
Neuchatel	... The Observatory.
Vevey	... Prof. F. F. E. Brunnow
Zurich	... The Observatory
	Prof. E. Wolf.

UNITED KINGDOM (ENGLAND.)

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	E. Dunkin, F.R.S.
	J. Glaisher, F.R.S.
	W. Thynne Lynn, B.A.
Birkenhead	... Bidston Observatory.
Bocking	... E. R. Knoble.
Berion	... W. F. Denning.
Cambridge	... The Observatory.
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Chepatow	... E. J. Lowe, F.R.S.
Collingwood	... Lieut-Col. J. Herschel, R.N., F.R.S.
Cuckfield	... G. Knott, LL.B.
Durham	... The Observatory
Falling	... Lieut-Gen. J. F. Tennant, R.N., C.B., F.R.S.
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Eastbourne	... G. P. Chambers.
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Greenwich	... Royal Observatory.
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	E. W. Maunder
Harrow on the Hill	... the Lieut-Col. G. L. Tupman, R.N.A.
Ipswich	... Col. Tomlinson.
Leyton	... J. G. Barclay.
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London	... Royal Society.
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- Rugby ... Temple Observatory.
- Southampton ... Ordnance Survey Office.
- Southport ... J. Baxendell, F.R.S.
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- Ann Arbor, Mich. The Observatory.
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Sciences.
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